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The Film in India

JACK HOWARD

JACK HOWARD is a graduate student in journalism at the University of California at Los Angeles. His article is based primarily on an interview with Ahmed Lateef, a student in the Theater Arts Department of UCLA. Mr. Lateef arrived at the university in September, and plans to spend approximately three years studying motion pictures before returning to his home in Hyderabad, India. He intends to enter the motion picture industry in India, and has already been active in it as a student and an assistant producer.

LIKE CAESAR'S GAUL, the film industry of India is divided into three parts—at least for all practical purposes. Yet with this basic lack of unity, with a vast population speaking 12 major languages and 125 dialects, lacking equipment and electrical power, and with only 10 per cent as many theaters as America, India today has the second largest film industry in the world.

Total Indian production runs about two thirds of U. S. production, twice as much as Japan, two and one-half times that of France, and more than five times Italian production. It has exceeded United Kingdom production since 1925. Yet the Western world knows little about the nearly 3,000 features a year that pour out of 60 studios located in Bombay, Madras, Calcutta, and a few other cities. Language barriers, as well as production standards, limit export of Indian films to Pakistan, Burma, Ceylon, and Malaya, although one or two films have been seen in Britain and the United States.

Indian production got under way in 1913 when D. G. Phalke released *Harischandra*. According to Indian historians, the film was extremely popular and encouraged several men to enter the production of silent motion pictures. Within a decade the industry had developed to the point where it produced 70 films during the 1924–1925 season. In 1931 a total of 328 films were produced,

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¹ Report of the Commission on Technical Needs in *Press, Film, Radio*, UNESCO, Paris, 1948. Supplement, 1950.

² Pauna Shah, *The Indian Film*. Motion Picture Society of India, Bombay, 1950. This is a comprehensive study of the industry in India, covering its material development, financial structure, production and distribution problems, and content and social impact of its films.

nearly all of them silent. Under the impact of foreign talkies, the Indian industry quickly adapted to sound so that by 1935 only 7 of the 240 features produced were silent films.

The character of the industry was probably shaped from the beginning by factors of high illiteracy, diverse languages, and religious opposition, according to Mr. Lateef. The beginnings were made by the Parsees, who had the capital for investment and who lacked religious tenets such as purdah (seclusion of women) which would interfere with production. That this religious group, Persian in origin, happened to be centered in the Bombay area is one factor that gave that region a lead in film production which it holds today. According to latest available estimates, 65 per cent of all films made in India in 1949 were made in and around Bombay, with only 20 per cent in Calcutta and 15 per cent in Madras.

Talking pictures were made first in the Urdu language which is spoken in northern India and is understandable, at least, throughout most of the country. It was to be expected that other language areas would find Bombay films insufficient, and the demand for films in the Bengali language gave birth, by 1928, to four companies in the Calcutta area. Within several more years, companies became active in Madras producing films in Tamil, although practically a monopoly in film production exists in that southern area. Subsequently, producers located in some of the other larger Indian cities began production, but today the bulk of the industry is represented by studio activities in the three major centers of production.

Specialization by Calcutta and Madras producers using the Bengali and Tamil languages respectively naturally restricted the circulation of their films, although within the past few years the latter, at least, have begun to follow the long-established Bombay pattern of multiple sound tracks for different language areas. Today major Bombay productions might be recorded with tracks in Hindustani (the post-British name for Urdu); Gujerati, language of the Bombay Parsees; Tamil; Bengali; or Telugu, another

southern dialect. It is customary to produce a major production in only two or three languages; in such a case, prints for areas which employ another language would be dubbed: i.e., actors from the particular areas would record the script in synchronization (as much as possible) with the lip movements of the actors in the film.

This practice of recording a film in several languages—as opposed to dubbing-in another sound track after the production is finished—gives rise to activities which, Lateef points out, might appear ludicrous in Hollywood. Each scene is shot, after rehearsals, as many times as the number of languages in which the film is being recorded. The actors will first go through it in, perhaps, Hindustani. Then, that scene safely in the can, they will shift into Tamil and repeat the scene. Throughout, multilingual prompters correct the actors in their pronunciation so that audiences speaking the language will not be too discomforted. This expensive process, however, is used only when the names of the stars or of the director and producer are such as to insure wide circulation of the film and consequent high returns.

As is indicated, the star system is rife in India. Often the names on the billboards will sell the picture no matter how unsatisfactory it might be otherwise. In fact, distributors will sometimes bid for and purchase a film solely on the basis of the stars and director signed by the producer, Lateef says.

Originally most actors were Parsees, although a few Hindus entered the industry at the beginning. Women were still in purdah at the time the industry began, with the result that actresses (as well as actors) were considered as late as 1928 to be low class and "not drawn from the cultured classes," to be the equivalent of dancing girls. During the early years of the industry chance played a heavy part in the financing and production of films, and many companies came into existence and passed on without any of their products reaching the screen. As a result of some practices during this difficult period, stars in India today still receive half their

³ Motion Pictures in India, Bulletin No. 614, Department of Commerce, Bureau of Foreign and Domestic Commerce, Washington, D.C., 1929.

salary before shooting begins, the balance immediately after completion of the film.

As the industry grew, however, and India modernized, more and more Hindus and Moslems were drawn into picture making. Some of the first actors to appear in Indian films are still in the industry and are highly paid stars. These and other featured players currently popular generally contract for each picture, frankly offering their services to the highest bidder. In view of the absence of the possibility of prior training on the stage or in other media, actors who have learned to act before the cameras are in great demand, and their salaries in a country of relatively low taxes are generous. As a result, salaries are a major production cost for Indian studios. Other expenses, such as sets, film, and processing, are relatively small. Thus it is the star system that both raises the cost of production and brings the trade to the box office.

Content of Indian films, for the most part, Lateef states, is decidedly inferior to the best international films. Movies are considered to be primarily entertainment and escape for the audiences, especially since there are no theaters, no public amusements, and radios and phonograph records are expensive. The typical film will contain a little of everything: it will start with a comedy sequence, then will shift to a nondocumentary treatment of some domestic or family problem, tying the whole together with a tragic finale. All is accompanied by songs—at least 14 or 16 popular songs for each movie, which on the average lasts two or three hours. These songs are ground out by crews of writers retained by the studios. Scripts—if such they can be called—sketch the outline; once the director starts shooting he does what he wants to with the actors and scenery at hand.

A departure from this type of production is reported at the Gemini Studios, in Madras. Here at "Movieland" is India's largest studio, "the most advanced in India in scientific organization, planning, efficiency and adherence to schedules." All of these

^{4&}quot;I Visit India's Biggest Studio," by Our Film Correspondent, Illustrated Weekly of India, Bombay, October 14, 1951.

virtues, according to the reporter, are conspicuously lacking in Bombay. Madras operations, which cover eleven acres, are consciously patterned after Hollywood methods. Shooting scripts are meticulously followed and quite often a year of planning and discussion precedes the first shooting. Exclusive contracts bind artists—whether star or extra—to the studio.

Although solid sets are being used in a few major productions and location trips are being attempted, sets usually are painted backgrounds with no pretense at solid representation. Most often there is no attempt at reality: the story, the songs, and the music—that is the content for all practical purposes. Lateef says that stories will often superficially explore personal conflicts representing old and new India, especially child marriage matches and the tragedies resulting from them. Suicide was often indicated until a few years ago as a way out of some of these conflicts, although violence as such is foreign to the Indian culture and finds little place in its films. Of late some effort has been made to produce films wholly comic or wholly tragic; even in the latter case, the requisite number of songs is included.

Music and singing play such an important part in Indian life that it is clear why both are so predominant in that country's film production. Quite often a producer will first collect the songs he plans to use and only secondly the stars. Few stars can sing, so good singers are hired to be dubbed in as the stars' voices. Actors who can also sing well may name their own price, and good "voices," whose faces never appear on the screen, are often stars in their own rights. Dancing is not as generously used in films because, especially in its classic form, it has less broad an appeal than popular songs and singing. According to Lateef, what dancing is included in films quite often is modern Latin-American in type. Also popular are modernized classical Indian dancing forms. In the latter, the sharp, angular movements are softened, and rhythms not unlike Hawaiian dancing are added. But the cost of dance sequences precludes their being used in every film.

Historical epics—wherein the facts are carefully observed and not tampered with—have been popular subjects for Indian producers. These, not unexpectedly, provide a framework for songs and music interspersed between historical episodes. Attempts to emulate the Hollywood pattern, which is acknowledged to be the best-developed cinema expression technically and often qualitatively, recently have led to films with perhaps only 10 songs, but there is no danger of their being displaced entirely. In fact this insistence on a high number of song routines is one reason why the exportability of Indian films is low. The songs are too tenuous, too peculiar to India, to permit their surviving long voyages overseas and foreign audiences.

Another important category of film subjects is mythology. The first films produced in India dealt with mythological subjects, although religious, historical, and social dramas soon became quite popular. Again, not unexpectedly, this type of subject matter lends itself to extensive use of music and singing, especially folk music and songs out of India's cultural past.

Production of Indian films is accomplished by an estimated 400 companies in 60 studios with 138 stages. Approximately 38 laboratories process the film. Some companies consist only of a producer and come into existence for one or two films, then dissolve. Others are well established and several, like Gemini in Madras, practically control an entire area. Bombay, however, is fairly competitive.

An estimated 900 distributing companies and agencies are active in India. The major American companies are represented by 10 of these distributors, as is the British Eagle Lion. Between six and ten prints of each Indian production and perhaps three of foreign films are circulated in India. Studios and distributors are owned separately, although several studios own a few houses. Both block and individual picture booking are practiced.

Latest available figures indicate that there are 2,060 permanent theaters in India, plus 900 mobile units and 30 temporary tent theaters. Attendance was estimated for 1949 at 250 million. A

⁵ World Communications: Press, Radio, Film, UNESCO, Paris, 1950.

total of 112 theaters in the country show foreign films, while 110 play both Indian and foreign. The balance show only Indian films. Houses are owned individually for the most part and are booked separately or in small groups, the circuit system being negligible in its effect.

As the result of several factors, including low admission prices and the practice of repeated attendance, films will play in a theater regularly for several months and in some cases one or two years. When a film hits an area, Lateef says, its songs are played on the local radio station, and phonograph records recorded before the film was produced are promoted in stores. Popularity of the songs in the film is credited for repeated attendance and long runs. High attendance by the poorer classes is effected by division of almost all theaters into sections ranging in cost from as little as 10 or 15 cents to a dollar or more (U. S. equivalent). Within several months the average film will have exhausted its audience, and the print will be exhibited elsewhere. And within several months after the film's exit, its songs die, the radio and populace having turned to the newest production.

Double features are for the most part unknown in India, the length of not less than two hours for each feature apparently sufficing. Few news reels are made privately; the national government handles all documentaries and most news reels and distributes them on a compulsory showing basis. Short subjects are practically unknown. Documentaries, especially those of an educational nature, are in great demand by the national government. It buys foreign and domestic products, as do some of the Indian states, but in general most documentaries are produced in the central government's own studios.

As may be expected, all production in India has been in black and white, although at this writing two separate attempts to produce color movies are being made. One, shot in Hindustani, is being produced by Sohrab Modi at the Minerva Studios in Bombay. The film, *Jhansi ki Rani* (Queen of Jhansi), is a historical

epic with thousands of actors, outdoor location shootings, and all the Hollywood trimmings. Started in 1950, this film is expected to take two years to complete. An English-language version is also being studied. When completed, this production will be India's first Technicolor film.

The other film, Aan (Moment), is being made in 16 mm. Kodachrome under the direction of Mahboob at Central Studios, also in Bombay. This method is being attempted to see if the expensive and highly restricted Technicolor can be by-passed. In current experiments, two color films are shot of the same scene. One—used for rushes—is processed by Eastman Kodak in Bombay; the other is airmailed to London for processing there. When completed, the film will be edited in London and copied in 35 mm. color film. Black and white copies in two languages are also being made, the color version being in Hindustani. This production, not generally publicized, is expected to be finished late in 1952.

When completed, there two films will be India's first films in natural color, but not the first in color. Previously, painstaking painting of sequences of approximately a reel in length, frame by frame, was resorted to by producers to capitalize on the hunger for color aroused by Western color films. The method employed was for an art school to be engaged to color a dance sequence, for example, the balance of the film to be left in black and white. A production line was set up with girls of the school seated approximately a yard apart, each with one color of paint. The film passed in front of them on a track frame over illuminated ground glass. Each girl would daub her assigned part of each frame, following a color scheme worked out for them. This was once done for an entire film, *Shakuntala*, which ran for three years at one house in Bombay. This same film also was enthusiastically received in London and other European cities, as well as in New York.

With the possible expansion of Technicolor facilities and utilization of the Kodachrome method, Lateef believes that increasing color in Indian films can be expected, and the end of hand-painted

sequences is practically assured. But this latter eventuality is not mourned. Colors in the hand-painted films were not natural; often colors would run over, or a frame might be missed, or other mistakes made. Comparison with Western natural color films has been too much for the hand-painted ones.

Censorship is accomplished in India by both the central and state governments through licensing and examining boards. Until 1949 the central government mainly concerned itself with classifying films either for adults only (18 years or more), or for general circulation. In that year, however, legislation was passed constituting a central board of film censorship for the entire country. No information is available yet on its operations.

The state boards concern themselves with the particular mores and customs of their areas, and producers generally come to know what will not be passed. With circulation into areas under several different boards, however, the result is that a high percentage of the films have deletions made in them before they are licensed for showing. Generally taboo are kissing, gambling, and drinking—prohibition being the law of the land. Foreign films are also subject to censorship, although the moral requirements for foreign actors are not as strict as for Indians. Cruelty scenes, however, are excised from foreign films because of the cultural difference: cruelty is abhorrent to Indians. Other taboos in any films are divisive political or religious subjects, understandable in the light of current Moslem-Hindu unrest in India and Pakistan.

In addition, licensing boards use their power to suppress entire films, but again this has been a state problem. For example, *Loves of Carmine*, with Rita Hayworth, was shown throughout India except in Bombay state. It was suppressed there because many Moslem followers of the Aga Khan, Miss Hayworth's father-in-law, considered it offensive that the wife of Ali Khan should be seen acting in public. This was immediately after their well-publicized romance and marriage. Subsequently, when the affair died down, other Rita Hayworth films were shown in Bombay.

Indirect control over the industry is held by the central government through building restrictions and import quotas. All raw film used in India is imported, from Great Britain for the most part. Some talk has been made of establishing the manufacture of film in India, but to date nothing has materialized. Generally the government has not hindered either importation of raw film or cameras and other equipment, none of which is made in India. In addition, there are few restrictions on exportation of profits on foreign films. Approximately 300 foreign films circulate annually in India, with the United States providing 86 per cent of them. Great Britain furnishes 10 per cent, Soviet Russia 3 per cent, and other countries the balance.

Currently the government is attempting to help the industry achieve higher technical ability through scholarships to students for study in America, England, and other countries. Hollywood, Lateef states, is acknowledged as the model for production techniques. Men now in the industry as well as government leaders interested in creating better domestic films encourage interchange of ideas. For India's first foreign location film a planeload of actors and technicians recently flew to Cairo for a sequence. More of this can be expected.

In the other direction, Indians urge Hollywood and other film industries to make productions in India. Not only can these industries avail themselves of good locations and low costs, but India stands to gain from experience in observing advanced techniques, and, if permitted, to gain valuable experience by working with and assisting foreign experts. International exchange of technicians also is desired by the industry, if production cannot be arranged. At present, approximately three or four institutes offer technical instruction in film production in India, but the level is such that advanced work must be done outside the country, especially in Britain. High costs limit the number of students who can come to America.

As another effort to stimulate the Indian film industry, the cen-

tral government and the industry have jointly sponsored the first international film festival in Bombay, which should just have closed as this issue leaves the press. Delegates from the United States, the United Kingdom, Communist China, France, Italy, Soviet Russia, and other countries attended the five-week festival. Scheduled for showing were 60 feature films and a number of documentaries. Two awards, one for the best film and one for the best Asian film, were to have been made at the conclusion of the festival.

The future of the Indian film industry cannot be described as other than most propitious. There is no competition of television to worry about; radio is still limited, especially interregional programs on short wave; there is little theater and few stage shows. Movies offer the principal entertainment available to the 343,-114,000 people of India. If Hollywood production declines numerically (as is expected) under the impact of television, it may be just a matter of years until the Indian film industry is quantitatively the greatest in the world. Beyond that much hard work—some of which can be done by Hollywood—remains before the quality of Indian production can be improved.

In Defense of Virtuosity

IRVING PICHEL

IRVING PICHEL has directed more than thirty feature films, as well as films for television. Recently he directed the production of the first performance of David Tampkin's operatic version of *The Dybbuk* for the New York City Opera Company.

It is a matter of some curiosity that the screen has developed so few virtuosi. There are great numbers of highly skilled technicians, many talented performers, many directors of artistic intent and, indeed, accomplishment, but few with that exuberance of skill, that delight in the play of adeptness which marks those who work under rigorous disciplines. Virtuosity is not confined, of course, to artists, musicians, or performers in public. It appears wherever mastery of technical difficulties is so complete that its possessor can perform feats beyond those demanded by the tasks or problems to which his skill is ordinarily applied. Virtuosity in sports leads to all sorts of tricks; in science, it may lead to discovery and invention; in the arts, it yields a special kind of pleasure quite apart from the content of the work in hand. Considered in this sense, it may be regarded as the abstraction of skill.

I am inclined to look upon it as a mark of youth and vitality in the practice of the arts rather than as a sign of maturity and decadence. It is one of the early fruits of mastery, and so it is to be distinguished from a weary, sterile technical competence. It is the swagger of the child, delighted with the skill with which he walks. In the man, it is not merely walking, it is walking on a high wire. It is the juggler not merely juggling five plates but juggling ten, blindfolded. It is the superabundance of craft.

Wherever great skill develops, there is a strong temptation to make a show of it. The term "virtuoso" is usually applied only to pianists or violinists of uncommon prestidigital skill, since these performers in public have every opportunity to exhibit technical facility in excess of that needed to draw music from their instru-

ments. Indeed, such display is considered almost obligatory. The greatest composers, not content to write concertos of surpassing difficulty, usually provide a cadenza toward the end of the first movement during which the orchestra remains silent while the soloist demonstrates that he can do things with a piano or violin beyond the *musical* demands of what has gone before. Sometimes the composer leaves the composition of a cadenza to the soloist himself, or the soloist substitutes one of his own that is more difficult than the one provided by the composer. It is as though, having performed with sensitiveness and feeling and exaltation as a channel for the expression of what the composer has to say, the soloist is given a parenthetical moment of his own in which he is permitted to point out that, besides being able to play with beauty and understanding and skill, he can, if necessary, play twice as many notes twice as fast. This may have little to do with music but there is no question that it is enjoyable. It is, in effect, a certificate of the performer's qualification to play the music he has just played and that which is still to come. He tells us, "before I could become a musician, I had to master this instrument, these hands and fingers."

Audiences take delight in feats of dexterity or agility, quite apart from meaning. A troup of acrobats may entertain for twenty minutes with various feats of tumbling. Then comes a moment of silence. Five men get down on their hands and knees in a row. A sixth indicates by pantomime that he will jump over the backs of the five, turning three somersaults in mid-air. Impressively, he estimates the distance. The drum begins a roll which becomes faster and louder as the acrobat leaps into the air, turning over and over and over again, landing at last to a crash of the cymbal. He runs toward the audience, his arms outstretched. There is wild applause. The bullfighter, after a series of passes with his cape, looks toward the stands, circling about to call attention to what he is about to do. He then kneels in the path of the bull and without moving from his position, evades the charge of the animal. He

rises, contemptuously turning his back on the frustrated creature, and raises his arms toward the spectators who respond to his invitation with shouts. The coloratura sings her aria, ending on high Cor D or E, the orchestra pauses to let the audience cheer, not because she has sung beautifully or because the aria is beautiful but because she has successfully achieved an incredibly high note. An ice skater may perform with the greatest apparent ease feats of grace and agility which can be enjoyed for their beauty of movement but there comes a moment when the skater executes a spin of such increasing velocity that his body becomes a blur to the eye. This is the moment that earns thunders of applause. Whatever beauty there may be in ballet dancing, what design and rhythm appear in its choreography, however capable it is of expressing emotion and ideas, there is always the moment of the seemingly impossible leap, the whirl sur les points, the exhibition of skill for its own sake that brings down the house. Possibly the skill that makes difficult things seem easy is greater, but the skill that makes seemingly impossible things possible is more admired. The late Artur Schnabel made little of the difficulties of playing Beethoven but, in private at least, made much of the supreme difficulty of playing the technically simpler Mozart. This, from the artist's point of view, was putting virtuosity in its place. From the spectator's point of view, it belongs in plain sight.

Virtuosity is pleasure-giving because it makes a clear distinction between the feat performed and the performer, measuring his ability against the difficulty of the feat, as standards and a crossbar make visual the challenge to a highjumper. It segregates the purely objective aspect of artistic accomplishment from the subjective, making manifest the difference between the artist as performer and as interpreter, between his perceptiveness and his perception. It is a claim on the part of the performer for recognition of his skill as distinguished from what challenges it—the work of a composer or the law of gravity or the moment of nature he wishes to paint or the awkwardly shaped block of marble from which, if he is

Michelangelo, he undertakes to carve a David. From the single point of view of technical skill, it makes any performer greater than his performance. Nor is this a mean aggrandizement, as it applies to the arts or to any undertaking in which technical mastery is a prerequisite. It endows its possessor with authority and validates his work. For there is no such thing, properly speaking, as a "mere" virtuoso. The term is misused if it suggests that abundant technique is unnecessary to the full realization of an artistic enterprise. And even works written chiefly to display virtuosity are turned to the uses of musical expression by the true virtuoso.

This whole question seems to me to have more than minor importance in the interpretive arts because it bears some relation to the mystery of personality, that quality of the performer that makes it impossible for him to be wholly lost in the work he is performing, that makes him in his own right arresting and more worthy of note than his fellows.

The virtuoso personality used to be quite common in the theater. Bernhardt may not have been as notable a Camille as Duse but she was certainly the more spectacular by virtue of the superlative things she could do with her exceptional voice, by her ability to use herself for the purposes of a role rather than to submerge herself for the sake of the play. Seeing her may not have been the same thing as seeing a play but was none the less an unforgettable experience. Sir Henry Irving was a virtuoso actor whose mastery was all the more apparent because there was so much to master, a lanky, lurching body and a curious, nasal voice that might seem the last materials in the world with which to create moments of startling beauty or high tragedy or electrifying theatrical effect. John Drew, of whom it was fashionable to say that he was always John Drew, was nevertheless a virtuoso in the delivery of the witty line, in the projection of that archetype of the gentleman-though-actor, a clear contradiction of terms in the period when his career began. Mrs. Fiske had virtuosity, so had

John Barrymore, so have Alfred Lunt and Lynn Fontanne today. The great pity has been that many of these performers have too often been content to apply their technical skill to easy challenges, to the showy role rather than the difficult play.

Now, films are both a medium for acting and an instrument or collection of instruments the mastery of which requires great technical skills as well as affording considerable outlet for artistic expression. It is in the nature of the medium that the technicians shall remain invisible and so be denied the personal aggrandizement the actor earns. Unhappily, they have outstripped in virtuosity those whom it is their main task to make visible and audible. Since they employ instruments of precision with predictable functions, they are accustomed to the idea of technical discipline, of the mastery of the utmost capacities of their tools—the lights, cameras, sound recorders, optical printers, the sensitivity of the film itself. They constantly explore further possibilities in the expressive use of these instruments and functions. They invent new effects, new combinations, even new machines. Yet, insofar as film is largely employed to record an illusive reality, the virtuosity of the technician-artists must conceal itself more completely, must abjure the moment of revelation which the cadenza so frankly grants to the violinist or pianist. The virtuosity of these realitymakers appears overtly only when they are set the task of making real what is patently impossible. In The Day the Earth Stood Still we see a disintegrating ray shoot from under the visor of a robot and reduce a machine gun and the soldier who mans it to a heap of incandescent ash. We see this happen before our eyes with complete "reality," though we know that, at this moment (though possibly not next year or even next month), nothing of the sort is possible. We ask ourselves how the trick is done. For the purposes of the fantastic tale, we accept the event as having taken place though we know it is a trick which we enjoy and admire for its sheer bravura. In the early days of film, Meliés, a French magician, made film do what nature cannot, and today we look to films that

represent what science cannot yet do for equivalent demonstrations of technical virtuosity. For those who are aware of how film images are constructed, the cutter occasionally is recognized as a virtuoso, as in *Desert Fox*, where he creates, out of innumerable two-foot flashes of film, the battles that raged across North Africa.

On rare occasions, the technician's virtuosity complements that of the visible performer, as in the scene in A Royal Wedding in which Fred Astaire dances up the side wall of a room, across the ceiling, and down the other side.

The virtuoso director is a rarity today. Von Sternberg was once such a director, as were René Clair and Serge Eisenstein. Our firstrank directors of today, men like Stevens, Wyler, Ford, Capra, or Kazan, are distinguished as screen storytellers rather than as film makers, though all of them are technically expert. They are realists whose first concern is with character and story and who find the accepted conventions of camera angle, shot sequence, and cutting adequate to their purposes. Only Alfred Hitchcock, whose stories are frank artifices, seems to enjoy his own ingenuity and technical resourcefulness to the point of letting both appear as secondary performers in his pictures. Such moments were the intercutting, in Strangers on a Train, of the desperate struggle of the tennis match with slow, agonizing efforts to recover the cigarette lighter, and the final sequence on the runaway merry-go-round. In his first two pictures, Orson Welles showed marks of filmic virtuosity, eclectic as it was.

Among performers, there has been only one notable virtuoso, Charles Chaplin. Quite apart from the fact that he is the creator of his own material and a perspicuous commentor on the mortal scene, he is an incredibly deft, exact, and accomplished pantomimist whose precision of execution adds immeasurably to the delight of watching him and, indeed, to the apprehension of what he projects. Though his virtuosity is as self-centering as that of an acrobat, it does not lower his stature as an artist but enhances it simply because it sets him apart from the content of his creation.

That there is only one player of the caliber of Chaplin may be due to the fact that there is in film acting no recognized tradition of discipline. Nobody has taken the trouble to determine what the screen actor must study, must learn, must practice to the point of easy expertness. It may be that the utter verisimilitude of the average film has no room for the kind of acting that is aware of the difference between the character and the performer and must forswear all method beyond mimicry. If this be true, we shall have to look to musical films and fantasies for what is inescapable in even the most realistic stage play—the constant awareness that there is a difference between the realistic and the real, along with the essential fact that there is a difference between the actor and the role, between the performer and his creation.

I do not suggest that the future of the realistic film lies with the virtuosi, but I question the maturity of the medium until its technicians and performers acquire an overflow of competence which is plainly visible and which gives pleasure for its own sake. This is no plea for greater artifice but rather for more art, for less mimicry and more imitation in the Aristotelian sense. It asks that those who make films show their delight in their profession for all to see.

Film Studies of Armament

ANTHONY R. MICHAELIS

DR. ANTHONY R. MICHAELIS, a science graduate of London University, was engaged during World War II in Allied scientific and intelligence work with C.I.O.S. and B.I.O.S. He has been active in the English Scientific Film Association, and is now at the University of Sydney in Australia. His work there is the application of scientific film as a research tool in the natural and social sciences.

FILM IS USEFUL in scientific research for two fairly obvious reasons. First, the camera can record unique events for later, leisurely analysis. Second, high-speed cameras can slow down fast action, such as explosions, ballistic research, aircraft propeller disintegration, and so on. The use of "slow-motion" has been of invaluable aid in the designing of guns and other service equipment, but since most of such work is of a very secret nature, little has been published about it in scientific literature.

High-speed cinematography was first tried by French scientists in 1874. In 1916 the German Zeitlupe camera was perfected by Erneman and used during the first world war for "various industrial, technical and ballistic purposes." This Zeitlupe had forty mirrors for optical compensation and reached a speed of 500 frames per second, i.e., a time magnification of 30x. The next remarkable piece of equipment, a "special rapid cinema machine," was designed by Heape and Grylls in 1926 for the British Army to study the bursting of shells and shrapnel, the puncturing of armor plate by projectiles, the recoil of guns, and the action of machine guns. It was a monumental machine compared with modern equipment. It weighed four tons, required an eighthorsepower motor to drive it, was housed on a railway truck, and was capable of speeds up to 5,000 frames per second (300 × time magnification) which was an outstanding achievement at the time. It was, and still is, the only high-speed cinecamera ever constructed and used for stereoscopic vision.

In the early 1930's a number of improved cameras became available: the Kodak high-speed camera (3,000 f.p.s.), designed by Tuttle; the Zeiss Zeitlupe, a development of Erneman's equipment; the A.E.G. and the Askania cameras. There is no doubt that all these were used extensively for war research purposes but only occasionally is an application described. For example, when the American Air Force investigated the cause of fire in aeroplane crashes, workmen constructed a steep, inclined runway with a thick concrete wall at the lower end. The aircraft under test was sent down the incline with the motor running full speed, and the impact of the plane against the concrete wall was photographed in slow-motion. Study of the slow-motion films was of great value in reducing fire hazards. Live parachute jumps were similarly recorded by high-speed cameras and the safety of today's parachute equipment is largely the result of studies of the filmed jumps.

An interesting earlier attempt by an air force to use film cameras for research was made during the 1914–1918 war. The British F-type aerial camera, driven by a propeller attached to the camera, was mounted on the outside of the aircraft. It was designed to film the ground over which the aircraft flew, but the results were disappointing and no further work along these lines was carried out.

The gun camera itself it primarily a training instrument and has been used as such for many years in the different air forces. Originally driven by hand-wound clockwork and running at 16 f.p.s. the modern equivalent is electrically driven, heated, and goes up to 64 f.p.s. To overcome difficulties presented by high plane speeds and vibrations, the shutter angle was reduced from 180 degrees to 45 degrees and special antivibration mounts developed. Color film has advantages for intelligence, but disadvantages from the point of view of rapid development on the spot. Black and white films were processed by the old "bucket" method until small developing machines and tanks were available later in the war. From the research point of view, the usefulness of the

gun camera lies in the fact that it records, often in slow-motion, the unique event—the disintegration of the enemy plane—for later, leisurely study.

Other examples of the use of high-speed cinematography in the American air forces include the filming, for slow-motion analysis, of jet propulsion engines, bursting propellers, exploding oxygen containers, aerial camera shutters, aircraft-launching devices, landing wheels touching down on the runway, and the building up of ice on propellers during actual flight through icing clouds. A convincing demonstration of the value of film in research was made during the trials of an American replica of the German V1 rocket. The rocket had failed to reach the required speeds. When the launching was filmed at high speed from a camera tower, poor rocket placement and consequent loss of power were revealed.

Considerable use of cinematography was made in England during World War II. The R.A.F. Medical Section filmed, both at normal speed and at 64 f.p.s., the movements of the tongue in speech of a patient who had had one cheek removed surgically. This film was not only useful for speech analysis, but of great help in the treatment of similar cases of face injury.

Some British tanks were fitted with "flails" which rotated in front to explode mines in the path of the tank. High-speed cinematography played an essential part in their design and improvement. In another experiment, cameras were fitted to the towing carriage of a hydrodynamic test tank in order to determine the effect of the long waves of the Pacific on the steadiness of the flight deck of an aircraft carrier. Films were also used in wartime to record accurately the many fires caused during the London blitz. The National Fire Service had its own Film Unit which turned out along with the fire-fighting equipment to race to the site of a blaze. The resulting films were carefully analyzed to establish the best and most economical methods of fighting similar fires in the future.

Very little use was made of films by either the British or the

American navy prior to the outbreak of war in 1939, little more than newsreels of aircraft landing on an aircraft carrier, or color films of gun flashes. Today it is standard practice in the Royal Navy to record on film each and every landing of an aircraft on the flight deck of a carrier. As the tempo of warfare increased and film was used more and more for naval training, it began also to find its place in research. An interesting example was the American filming in color at 1,000 f.p.s. of human volunteers in crash impact studies. From study of these films came very much improved safety gear. Another example was the use of high-speed underwater cinematography to track a body, presumably a bomb, entering the water with high aerial velocity, to find its exact behavior in the water in three dimensions. Special cameras were built for this purpose and the film was run continuously in them; the illumination was provided by special flash units, giving flashes of 1 microsecond (one millionth of a second) duration. With a film speed of 35 feet per second the object could move up to speeds of 250 miles per hour when entering the water. These experiments were carried out in a large tank containing double distilled water with a light transmission of 99 per cent, necessary because at a distance of 25 feet from the camera the transmission falls to only 78 per cent.

The Royal Navy used underwater, high-speed cinematography to record the launching of a torpedo from a submarine; the experiment was carried out in the open sea and the camera operated by a frogman. The interesting pulsations of the ejecting gases had never been seen before, and the film has been very helpful to designers and engineers.

From research deep below the sea it may be interesting to switch to research high above the surface of the earth—rocket flight. The Germans had already used many types of cinecameras in their original research work on the V2 or A4 rocket. Many of their research films were captured by the Allies who used them when they took up rocket research where the Germans had been compelled

to stop. The problem is to follow and to record accurately in three dimensions the flight of these rockets at supersonic speeds up to heights of over 100 miles above the surface of the earth. Quite naturally very special cinecameras had to be evolved, though the ordinary high-speed camera, 3,000-5,000 f.p.s., is very useful for the recording of the take-off, and many small cinecameras are used for recording the instruments on the ground both prior and during flight. Other 16 mm. cameras are built into the rockets and record from there the path of flight, pointing directly downward, and show the rotation around the longitudinal axis during flights. But the most interesting and unusual ones are the kinetheodolites. The basic unit was developed by the Germans, the Askania K41, and this instrument is still used by the Americans. Today it is a combination of an astronomical telescope, a theodolite, and a cinecamera and on its film are recorded the horizontal elevation. the lateral displacement, the time in hundredths of a second, and, of course, the rocket itself. By the combined use of two such instruments it is possible to plot accurately the flight of a rocket in space. While the standard lens in all cinematography has a focal length of 1 or 2 inches and 4- and 5-inch lenses are considered long focals, a 16-inch diameter Newtonian reflector gives the kinetheodolite a "lens" of a focal length of 40 to 80 feet! The instrument is situated about 40 miles away from the site of firing at an elevation of 8,000 feet. The results obtained have revealed functional failures, separation of booster rockets, ejection of experimental apparatus, and so on. Studies of jet flames on color film both photometrically and spectrographically have also helped in the rapid advance in this field of research. It has been possible to measure the orientation of the axis of a V2 rocket at 20 miles height with an error of only 0.6 degrees.

But undoubtedly the greatest achievement of cinematography in the field of scientific war research was the filming of the atomic bomb explosions at Bikini Island. Three hundred and twenty-eight cameras were used in the air above and a total of 360,000 feet

of film was exposed for the two explosions, apart from 1,500,000 feet during preliminary trials. Thirty-six high-speed cameras were set up and eighty cameramen were needed to film this one scientific experiment. Here again it was necessary to record accurately in three dimensions the positions of the cameras themselves in the aircraft from which they were working. Most important, they all had to be started at precise intervals of times immediately prior to the actual explosion—the interval depending on the type of camera used and varying according to its speed. All the cameras on the ground had, of course, to be worked completely automatically as the radiation would have been fatal to the operators. The timing was only possible by the broadcasting of time signals and the employment of complicated electronic gear which performed all the switching operations. This exact timing and precise coordination was essential because the films obtained served as the fundamental basis on which the effects of the blast forces, the height of the water column after a given time, and all the other phenomena were analyzed. It has been estimated that the evaluation of the films obtained required a period of four years. Without film it would have been impossible to carry out this experiment, since no other scientific equipment exists for recording accurately and permanently the information presented by it.

If this survey has given an indication of the role of the scientific film in the research work of the armed services it will have fulfilled its purpose. Should there be another war, there can be no doubt that the unique characteristics of scientific research film will again qualify it as a major method of achieving victory.

Workshop in Radio Music—UCLA

BORIS KREMENLIEV

BORIS KREMENLIEV has composed background music for many radio programs in this country and in Europe, is a composer of large orchestral works, chamber music, and songs. He is currently at work on the score for *The Crucifixion*, an art film based on the paintings of Rico Lebrun. Onetime musical director of the South German Network for the U. S. War Department, Dr. Kremenliev is now on the faculty of the University of California at Los Angeles, teaching composition, orchestration, and various theory courses, in addition to the course described here.

THE DIFFICULTIES of presenting for the first time a semester course on music for radio are only too obvious—the lack of experienced personnel, of studio facilities, of academic tradition, of books on the subject, and of basic equipment.

Music fills an important part in the over-all picture of broadcasting, and such related phases as production, continuity writing, program building, acting, and announcing cannot be overlooked. The organization of the music department of a radio station or a network—composing, conducting, arranging, copying, clearance rights—all are especially important to the student who has one eye on the radio industry as a prospective career.

Since the level of work covered in college classes is largely determined by the student material available, it is not difficult to foresee complications other than those already mentioned. The term "radio workshop," from which the course title under consideration evolved, has been rather unclear in the minds of educators and students alike. Its probable originator was Philip Cohen, at one time manager of the Radio Workshop at New York University, and later director of American Broadcasting Service in England. Used for the first time some fifteen years ago, this term today has no more standardized concept as a college course in radio than it had then. A factor contributing to this confusion of the objective, organization, and character of courses in radio has been the fact that much of the instruction at college level has been done by faculty members whose experience has been with educational

rather than commercial radio stations. The work of these college stations was also quite separate from the broadcasts, either sponsored or sustained, prepared by independent stations and networks but designed for classroom use, such as the Standard School Broadcasts, sponsored by the Standard Oil Company of California.

In the spring of 1951 there were fifteen students registered for UCLA's initial offering of Music 116, Workshop in Radio Music, a two-unit upper division course. The proposed program included "the function of music in radio. Problems of programming, acoustics, recording, and editing. Microphone technique. The nature of background music. Preparation of radio programs. Composition for radio." The major portion of the material was covered as problems came up during actual production of radio programs. In this particular instance, eleven of the students were especially interested in composing and conducting; two in directing; two had enrolled because of "interest and enthusiasm," as they put it. Therefore, great emphasis was placed on scoring especially for the microphone, placement of instruments, handling of small combinations, acoustical phenomena which are present in transparent distribution of instrumentation, "thin" linear writing vs. heavy harmonic textures, etcetera. There were two young ladies in the class, so that scripts with no more than two female parts became popular. The orchestra consisted of a flute (doubling on alto flute, piccolo, clarinet, and saxophone), clarinet (doubling on saxophone), bassoon (doubling on clarinet, "easy passages only"), trumpet, trombone, percussion, and piano, with eight candidates to play the piano.

The possible color combinations were many and varied. Toward the end of the semester the general opinion of the student-composers was that it was not really necessary to have a much bigger combination if one scored economically and with skill.

After a brief survey of broadcasting, discussions on the various systems now in existence, the mechanics of scheduling, production, etcetera, most of the semester was devoted to actual music which accompanies radio production, since the majority of the class was primarily interested in this aspect of radio work.

Analysis of all types of programs was made; music from singing commercials to background for mysteries, comedies, and documentaries was brought in and analyzed in detail. Scores were examined to determine how signatures were used; where cues and background music fitted; how long they took; what types of harmonies were preferred; how cues were scored and why; how appropriate the music was to the situation and the context, tempi, and dynamics. There followed finally the production of several programs with original music.

One of the first projects was the presentation of *The Cash of Amontillado*, an adaptation of Poe's short story made by one member of the class, who also directed and played the part of Montressor. A somewhat detailed analysis of the step-by-step progress of the score will illustrate the manner in which the class attacked the problems as they came up.

1. Announcer: The Cask of Amontillado!

2. Music: (Eerie theme, establish and under)

3. Announcer: The Radio Division of the University of California

4. at Los Angeles presents a radio adaptation of a

5. short story by Edgar Allan Poe, entitled . . .

6. The Cask of Amontillado.

The announcement from line 3 to line 6 is made after the music, example 1, has been established and faded.

The mood of the story here is established with the strange unison passage of the bassoon and muted trombone. The sting in measure six, example 1, comes after "entitled" and crescendoes under until the end of line 6, at which time the music is ready

¹ Illustrations from the radio script, The Cask of Amontillado, are reproduced here with the permission of the author, William Flatley, who is also a student in the Theater Arts Department at the university. A much more elaborate and professional production of his script was later make by Theater Arts, using the original score which is discussed here. Script and music examples are given as they appear in the original. No attempt has been made to standardize abbreviation of instruments, nor to edit notations. Wherever scores are cited, the transposing instruments have the parts as they play them; in the piano reductions, all parts are given as sounding.

for the descending, dark, unison passage in the last two measures, taken at a tempo twice as fast as the opening.

7. Music: (Sting and under)

The original plan was to sting after the title, and then fade. Mr. Ulyate's treatment, however, was well received and the main punc-



tuation took place in line 5 instead. After the title announcement, measure six, music builds up and fades to BG for:

- 8. Montressor: The thousand injuries of Fortunato I had borne
- 9. as best I could, but when he ventured upon insult
- 10. I vowed revenge.

And as he continues to lay his plan for vengeance, we hear him five lines later:

15. ... I must not only punish (music out) but punish 16. with impunity.

Although the script indicates no break whatever in the phrase after "punish," the composer very skillfully used a device of emphasis, i.e., pointing "but punish with impunity" by cutting the music out at that point. Although the director had planned to take out the music much earlier, several different ways were tried out, and after he was convinced of the effectiveness of the above, he changed his copy of the script to read accordingly.

Montressor knows the one weak point of his projected victim: pride in his connoisseurship of wine . . . although, like his country-

men, he was a quack in painting and gemmary. "And it was with this consideration," says Montressor, "that I hit upon a plan that would rid me forever..."

The original script here read (beginning at the top of page 2):

1. Music: (Carnival music up and under)

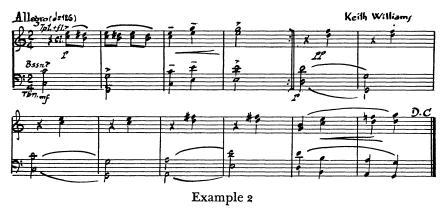
2. Sound: (Voices ad lib under)

3. Montressor: It was about dusk, one evening during the supreme

4. madness of the carnival season, that I encountered

5. my friend.

6. Music: (Swell and under)

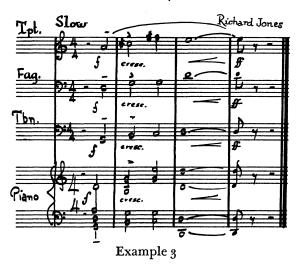


After several rehearsals it was decided that the ad lib voices, line 2, added too much confusion without necessarily helping the action significantly and the following change was made: "And it was with this consideration that I hit upon my plan..." Lines 1 to 5 on page two were cut, and the carnival music sneaked under the world "plan."

This cue, example 2, was one of the most successful; it is clever and appropriate. The circus illusion given by the brass which stand out in the outside parts is unmistakable. The octave doubling in measures three and four, as well as the constant parallel thirds, are as effective as they are curious. After the Da Capo, the first four measures were repeated, then the bassoon and the trombone were left playing the bass line only; later the trombone was left alone, playing the figure in measures one and two, until the director was

ready to fade the music altogether. This was a change made at rehearsal, and it worked out well, since it gave the illusion of the music's gradually dying away in the distance, in which case it is very believable that one might hear only the bass and not the melody.

Montressor has just bought a cask of Amontillado, he says, and tells Fortunato that he fears he may have been swindled. Fortu-



nato doubts that there would be a genuine Amontillado during the carnival season; in fact, he is positive that there would not be. This is Montressor's moment.

"As you are engaged," he states, "I am on my way to Luchresi. If anyone has a critical turn it is he...." The trick works. He, Fortunato, who is always respected and feared, his taste in wine is compared to that of Luchresi!

"Luchresi cannot tell Amontillado from sherry," he remarks indignantly. Then,

(Original script, page 3)

1. FORTUNATO: Come let us go.

2. MONTRESSOR: Where?

3. FORTUNATO: To your vaults.

- 4. Montressor: Oh, no my friend, I will not impose on your good
- 5. nature. You have an engagement. Luchresi will...
- 6. Fortunato: I have no engagement . . . Come.
- 7. Montressor: My friend, the vaults are insufferably damp and
- 8. encrusted with nitre.
- 9. FORTUNATO: Let us go, nevertheless. The cold is nothing.

The rest is easy. Present a strong-willed person with enough objections to his doing a thing, and you may be certain that it will be done. And so the two, suspiciously reassuring one another of their friendship, make for the damp, dark catacombs of the Montressors.



The odd progressions of example 3 seem to capture the feeling of time and period; the utter simplicity with which Mr. Jones achieves his effect is astonishing, as is the choice of color.

Suddenly, there is a pause.... Nitre! Fortunato begins to cough. "Come," Montressor urges, "we will go back, your health is precious. You are rich, respected, admired, beloved; you are happy as once I was. You are a man to be missed.... You will be ill and I cannot be responsible. Besides, there is Luchresi...."

Nothing can stop Fortunato now, let alone a mere cough. But a drink of Medoc will protect him from the damp. "I drink to the buried that repose around us," proposes Fortunato.

"And I," adds Montressor, "to your long life." When we hear the music, however, we are sure that his life will not be very long.

The nitre hangs like moss along the passages of the vaults. They pass through long walls of piled skeletons, with casks intermingled, below the river's bed. Fortunato coughs, but they proceed.

Again the music is reminiscent of the great catacombs of Paris, with low arches and deep crypts. In this register, the muted trombone, with the player's hand over the end of the mute, sounds far

off and choked; the color is fresh, and since the player has to blow hard to produce the tone, the result is most unusual.

Bones lie upon the earth. Finally Montressor and Fortunato arrive at their destination, "an interior crypt, in depth about four feet, in width three, in height six or seven. It seemed to have been constructed for no special use, but formed merely the interval



Example 5



between two of the colossal supports of the catacombs, backed by a wall of solid granite. In this granite surface were two iron staples, distant from each other about two feet horizontally. From one of these hung a short chain, from the other a padlock. . . ." Montressor pushes Fortunato against the wall of the recess, and begins to wall up the only entrance.

(Original script, page 7)

- 22. FORTUNATO: Please, Montressor, I am not a young man, a few more
- years and you will have everything. (Pause) Do you
- hear me? Everything, my friend. (Pause) Let me live, I beg you.
- 25. (Breaking) I hold public office, I will be missed—Montressor!
- 26. (Hysterical sobbing) Have mercy. Listen to me,
- 27. Montressor! (Screams)

(Original script, page 8)

1. Music: (Up and under)

The slightly confused, irregular two-part counterpoint is very deceiving on paper. The effect of the octave leap from high G is almost terrifying. Both instruments are blasting in a brilliant register, and the distorted, empty intervals suggest distortion and pain. After five seconds, the music fades and holds under:

- 2. Montressor: As I placed row upon row of bricks, his screams turned 3. into moaning cries and then a long obstinate silence.
- 4. (Music out) As I finished the eighth,



Example 7

5. ninth,



Example 8

and tenth tier, it was accomplished by furious

6. vibrations of the chain (fade) and . . .

7. Sound: (Chain and body against wall)

8. Fortunato: Help! You are insane.

The picture of Fortunato's situation grows worse and worse. All that can be heard now are his desperate cries from a distance, and the sounds of bricks being placed next to one another.

Finally, we hear the last brick slide into place, cutting off the screams, and then the sound of the trowel on wet brick.

Music: (High G ending and under)

The music then fades to back the credits for actors, composers, producer, engineer, and script writer.

George Antheil, who was visiting the university as part of the Composer's Council' heard the recording of the program and said



Example 9

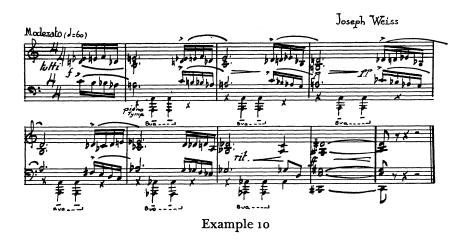
that it had a professional air about it; that most cues were appropriate and that the general effect was one of the music performing its function in a most orderly and inconspicuous manner. He ought to know! His chief criticism was that some cues might have avoided the use of unison (examples 1, 4). He also pointed out that

²In the past few years, the Music Department has invited leading figures in the field of musical composition to give public lectures on campus and listen to student works. Among those who have appeared are the late Arnold Schoenberg, Aaron Copland, Howard Hanson, Roy Harris, Darius Milhaud, Roger Sessions, Virgil Thomson, Otto Luning, George Antheil, Carlos Chavez, and others.

³ Antheil, author of a best-selling autobiography, Bad Boy of Music, composed his first opera at the age of 29 (Transatlantic), and followed this by other stage works: Flight, a chamber opera; Fighting the Waves, a ballet for marionettes; and Dreams, a ballet. He was only 22 when the Berlin Philharmonic performed his symphony, Zingareska. At the present time he is at work on his Seventh Symphony. He has composed scores for some forty motion pictures, among them The Scoundrel, Once in a While, The Plainsman, Make Way for Tomorrow, In A Lonely Place, That Brennan Girl, Knock on Any Door, and Sirocco.

literal imitations (which appeared in a cue not quoted here and later deleted altogether from the score) are regarded askance by the more discriminating composers and film directors. Mr. Antheil suggested that most movies, as well as radio plays, would do better without any musical score.

"In a recent picture," he elaborated, "the waves dashing upon



the shore were backed not only by natural sound, but by the music as well. All this is too explicit. The same thing was being said three times simultaneously. . . ."

There is no question that function and art may be inseparable and even that one may create the other; it is the problem of the artist, however, to realize the power at his disposal as well as the limitations which must often be self-imposed. The composer must realize that the music is there to assist, not to compete with, the story; on the other hand, the film and radio director ought to understand that music is entitled to live its own life. This is true of music for stage and screen where the composer works on a much larger scale. In radio, where music cues are measured in terms of seconds, such musical individuality is neither possible nor practicable. The sooner a young composer learns that composing for radio drama is more a craft than an art, the happier he will feel

about the music that he works so hard to create, and that he seldom hears the way it was written.

The Cask of Amontillado was an interesting experiment. It showed among other things the possibilities open to the imaginative composer to make a small orchestral combination sound full, loud, and good, by proper microphone placements and scoring—a technique which is radio's own. (I have experimented with more than one microphone for small combinations, and have found, at least for my own use, that best results are obtained with one microphone only, even under the finest acoustical conditions. One of the reasons, I believe, is that a number of microphones presupposes the assistance of an engineer in the control room, who has to use his judgment in matters of balance; with one microphone only, the conductor can do the balancing himself, thus rendering a truer dynamic balance of the orchestral timbres involved.)

Both cast and orchestra used one microphone for all productions, as shown in figure 1.

There was no studio and no control room. Recordings were made in the classroom, with a portable Wilcox-Gay tape recorder which had only "record," "tone," and "volume" knobs in addition to the recording indicator.

The primitive conditions under which the workshop operated were by no means a disadvantage, although better equipment and studio facilities would have made a great improvement in the finished product. The purpose of these productions, however, was to test the musical scores, and for that purpose the recordings were adequate. Several of these tapes are on file at the music office, where a library of cues is being started for the course, together with the recorded presentations done in class.

The Workshop in Radio Music tried in a limited way to develop the analytical power of the student. It helped him to get a better grasp of the functions of radio music and gave him a better understanding of the problems of radio in general, by picturing the organizational setup as well as the complexities which accom-

pany a program—from the idea to the actual broadcast. It emphasized the economic, social, political, and artistic significance of this mass medium. But since radio is a profession and a business, as well as a medium of communication and expression, it was necessary to stress practical as well as cultural and educational values of radio.

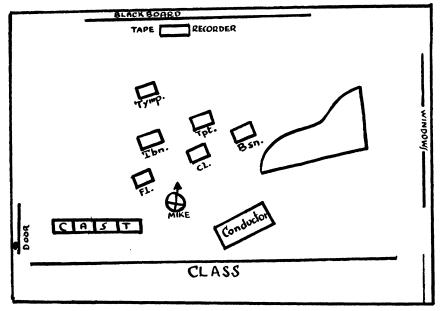


Figure 1

Therefore, the potentialities of radio music as a source of income were carefully surveyed in this course. The course was designed to provide an outlet for the skill of the future composer, conductor, and arranger. It provided the student with laboratory conditions similar to those in the commercial field under which the future professional will operate. It gave the composer an opportunity to hear his scores, and to conduct them—an opportunity seldom offered on the outside. It is unfortunate that in the United States a young composer or conductor interested in radio has no opportunity to learn his craft in the field, as he has in Europe. In my opinion, for this reason alone it becomes the duty

of the university to supply some of this training, and to equip the student for the competition he will encounter later. One of the students in the Workshop for Radio Music, spring semester, 1951, who had never composed before, has already done independently two scores for radio, and another has composed the background for a short documentary film.

The laboratory procedure of the Music Workshop was similar to that used in the excellent productions of the Theater Arts Department, where actors, directors, camera men, photographers, radio technicians, and film producers learn by doing. It is the counterpart of the exhibit for painter, sculptor, and ceramic artist, the recital for the dancer, the concert for the performing artist.

Over and over again the question came up: "How do you know what kind of music to write so that it will fit a certain dramatic situation?" Marc Blitzstein has summed up the problem neatly:

Music in the theater is a powerful and almost immorally potent weapon. It will do things you would never dream of; it will be fantastically perfect for one scene; it can louse up another scene to an extent that is unbelievable. There is only one rule I know: follow your theater instinct. You discover you've got it very much in the same way you first discovered you were a composer. You may be wrong on both counts, but your inner conviction is all you've got.

But the student needs to hear and see his work produced in order to strengthen his feeling for the dramatic appropriateness of what he writes. By providing facilities to meet all demands for the purpose, the university can not only render service to the students who go through such specific courses, but, by encouraging experimental radio production involving music, it may be of service to the industry in general and thus to the community at large.

⁴ Wilfred Mellers, Music and Society (London: Dennis Dobson, Ltd., 1946), p. 142.

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From Book to Film: Summary

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EACH OF THE three preceding articles in this series has analyzed in some detail specific kinds of changes that are introduced in the film versions of books which are adapted to the screen. In the study on which this series is based, 'similarly intensive analyses are made for many other aspects of the problem, and in this final article, the findings of that study will be summarized. While some of these merely add data which support beliefs already widely held, others modify or refute some of the stereotypes which characterize thinking about the moving picture product. That these findings are based upon carefully collected facts rather than upon emotionally charged impressions gives them—whether they be obvious or expected—an objective authenticity which merits more than passing attention.

Certain cautions are necessary concerning the general application of the findings. In the first place, the nature of the original novel itself naturally determines many of the changes required, and since the universe of the novel is so heterogeneous, an analysis of a small sample, while a valid technique for determining what changes occurred in the chosen films, is not a reliable method for predicting in minute detail what specific changes will occur in another sample of book-films. The *pattern* of changes which emerges from the findings will be repeated in any sample of films, but the variations in the content of the novels themselves control the

¹Lester Asheim, "From Book to Film." Unpublished Ph.D. dissertation (University of Chicago, 1949).

degree to which the rules governing film adaptation will have to be applied.

In the second place, the sample represents only those films which are derived from classic and standard works of fiction. The findings of the investigation do not reflect the character of the total Hollywood output, but only this very limited segment of it. If recollection of films seems to contradict certain of the findings (the retention of unhappy endings, the reduction of violence, etc.) the deliberate limitations of the sample should be borne in mind.

Lastly, in order to deal with the material in some meaningful way, the changes have been treated throughout the study as functions of the apparent primary cause. The assigned causes, while based on careful analysis, should be recognized as arbitrary, and to some extent, hypothetical. One change may serve many purposes, and the cause which is assigned here should be taken, not as the only possible one, but as the most likely *primary* cause. The complexity of the reality is recognized even though, in the interests of clarification, its presentation is oversimplified.

With these reservations, the findings are an accurate reflection of what happened to twenty-four novels which were adapted to the screen, and may be taken as an overview of the pattern of adaptation technique employed by the film industry when confronted with a novel of wide audience and high critical standing.

IMPOSITIONS OF THE TECHNOLOGY OF FILM PRODUCTION

- 1. The nature of the medium inevitably forces the translation of the verbal form of the novel into the visual form of the film. Essentially this is a stylistic change which substitutes a pictorial style for the literary style of the novel. It alters the manner of storytelling, but need not alter the matter.
- 2. No matter what the length of the original novel, the film version will not vary greatly from the standard feature length of approximately 8,000 feet. The manner of presentation is one factor which dictates film length: eye and bodily fatigue arising out of

the conditions of film projection limit the ability of the audience to devote its attention to the screen beyond a certain time span. Since economic considerations are well served by this necessity in that shorter performances result in more frequent audience turnover, the combination of factors militates against greater length for development of the film's theme even though technically the camera is capable of extending a performance to any desired length.

- 3. In order to fit the requirements of length, the material of the novel is almost invariably condensed for film purposes. In only one of the novels in the sample does the film version expand the original content. Obviously expansion or condensation is a function of the length of the original book, but only an extremely short novelette or novella lacks more than enough matter to fill up the ninety minutes of playing time allotted to feature films.
- 4. Condensation results in the omission of material from the film version which the novelist apparently considered essential to his original conception. The reduction of a long novel to a comparatively short film play requires many omissions. The necessity to condense, however, dictates only that something must be eliminated, but does not prescribe what that something shall be. Length, then, explains omissions only incidentally; the selection of specific material for deletion rests upon additional considerations as well.

Considerations of the Artistic Use of the Medium

- 5. The more active sequences from the novel are the ones most frequently used for the film version. To exploit the camera's special ability to portray action and movement, the film version concentrates upon plot rather than upon character drawing, philosophical commentary, or analysis of implications.
- 6. Nonactive passages, in the majority of cases, are presented on the screen only when necessary to the plot action, and then in a more active manner than in the book. Static aspects of the novel

(introspection, author's commentary, interpretive matter) are reworked for screen purposes to reveal themselves in action and dialogue, and the author-as-commentator usually disappears completely (see 11 below).

- 7. New action without precedent in the book is added to the film version to exploit the camera's advantages. Thirty-six per cent of all the scenes in the twenty-four films were scenes which were invented for the film version, in addition to the many scenes which, as described in 5 and 6 above, present the book's material in more active form. All such scenes are not necessarily departures from the sense of the novel in that many of them convey, in different terms, the same idea; but all supply dialogue, action, and setting without direct precedent in the novel.
- 8. Despite the emphasis on action, description (translated into pictorial scenes which serve the descriptive function) is not lost in the transition of the novel from page to film. In 54 per cent of the films, as great a proportion or more of the total length of the film is devoted to descriptive scenes as is devoted to descriptive passages in the novels from which the films are derived. The visual character of the motion picture makes possible a graphic carry-over of descriptive passages which are, in their own way, an exploitation of the camera's special forte. Since many scenes of action are in essence descriptive, the incidence of descriptive passages does not contradict the finding that emphasis in the film version rests primarily on action.
- 9. A greater variety of settings and costumes is introduced in the film version than in the novel. Settings need not be redescribed in the novel to be used again for subsequent action, but on the screen they are in effect redescribed each time they are shown because of the explicitness of detail which characterizes visual presentation. To avoid the monotony which results from such repetition the film versions usually supply a variety of backgrounds not always included in the novel. Such changes need not alter the course or the sense of the action or dialogue.

- 10. Narrative viewpoint is consistently omniscient and usually impersonal in film adaptations, regardless of the viewpoint employed by the novelist. Eighty-eight per cent of the films in the sample are told from the impersonal omniscient point of view, and all of them are objectively omniscient in their narrative viewpoint. Three of the films utilize a partial first-person narration, but none of them adheres strictly to the limitations which first-person narration imposes on the novelist, and all take advantage of the camera to record action and scenes which are outside the ken of the narrator.
- 11. Consequently the intervention of the author as personal commentator on the action or theme is almost never retained. In only one film in the sample (The Magnificent Ambersons) is a narrator used to speak in the voice of the author as disembodied and ubiquitous analyst. The objective omniscience of the camera eye makes the services of an interpreter unnecessary; in effect, the filmgoer is a spectator of the action as it occurs rather than the recipient of an account of it at second hand.
- 12. "Unity of action" is more closely observed on the screen than in the novel. Because of the condensation required and the method of presentation, the film follows closely the traditional structural rules which regulate writing for the theater. Nineteen of the twenty-four films concentrate upon the major line of action to a greater extent than do their source novels. To accomplish this, subplots, secondary action, and subsidiary characters are reduced or eliminated.
- 13. Dramatic construction not only requires the elimination of material from the script, but also often dictates a rearrangement of the material that is retained. In fifty-four different instances in the sample films, the sequence and relationship of scenes are altered to provide for their more striking juxtaposition; in twenty-two different instances, later effects are anticipated by the early "planting" of information; in 50 per cent of the films, duplicate action is condensed to avoid the anticlimactic repetition of similar

effects; and in a different group of twelve films the structure of the script is so arranged as to eliminate lengthy passages which, in the book, occur after the point which the film uses as its denouement.

RECOGNITION OF THE LIMITATIONS AND INTERESTS OF THE AUDIENCE

- 14. The assumed level of audience comprehension is generally lower for the film than for the novel. In addition to the structural simplification which results from condensation and tighter dramatic construction, every effort is made by the screen writer to avoid the possibility of confusion, misinterpretation, and incomprehension on the part of the audience. Names of characters are changed when they resemble the names of other characters, when they are difficult to pronounce, or when they are apt to carry inapposite connotations. Dialogue is simplified, modernized, shortened, and made more readily intelligible. Ideas and concepts are rendered less complex, related to contemporary general knowledge, and stated with greater explicitness.
- 15. The film is more explicit in almost all of its details than is the novel. Greater explicitness is, in part, a deliberate imposition of the writer in the interests of simplification, and in part an automatic function of photographic technique, which translates indirection and subtleties easily into direct and concrete images. The personification of good and evil, the demonstration of abstract ideas in concrete action, and the creation of visual symbols for nonvisual concepts illustrate the ways in which the screen writer capitalizes upon the characteristics of the medium to promote the simplification allegedly required for the mass audience.
- 16. Characterization tends to be centered on a single, identifying characteristic more frequently in the film than in the novel. When explicitness is combined with simplification the result is frequently an all-white / all-black presentation of character and issues as opposed to the more deeply analyzed "gray" of the novel.

Twenty-three major characters in fourteen of the scripts are thus made whiter or blacker than their literary prototypes, transforming the protagonist and antagonist into the more popularly acceptable "hero" and "villain."

- 17. Normal chronological sequence is followed more closely in the film than in the novel. Whereas seven of the novels begin in the middle of the action and then pick up background later, only two of the film versions follow this sequence of events, and one puts the recapitulation of background in straight chronological order once it has begun the "flashback."
- 18. The importance of the romantic love story is stressed to a greater extent in the film than in the novel. The love story is made to loom larger in relation to the whole in the film versions of 71 per cent of the novels in the sample, through stereotyped devices familiar to audiences seeking for romantic clues; through plot tricks (like unconventional meetings and chance tête-à-tête encounters); through casting of romantic "hero" and "heroine" types in leading roles; through complete rewriting which adds incidents which exalt the love story above the other aspects of the plot; or through the omission of other aspects so as to leave the love story dominant by default. In addition, 63 per cent of the films in the sample provide a traditionally romantic happy ending as the culmination of the story, whereas only 38 per cent of the books do so. By capitalizing on the final impression, such romantic endings serve to give the heart-goal a preëminence over the other aspects of the plot even where the preceding action has emphasized other goals.
- 19. The tone of negation is never retained completely in the adaptation of a novel to the screen. Although more than half of the "unhappy" endings are retained in the sample films, none of them keeps the note of indecision, frustration, hopelessness, or despair which marks seven of the novels. In every instance action is rearranged or rewritten to provide hope and consolation, a sense of pattern and meaning, and a note of affirmation.

- 20. Personal solutions are usually provided by the film for problems which the novel presents as universal in their implications. Of eighteen novels in the sample which may be said to reflect issues of universal application, only three of the film versions retain the representative character of the novel. The others personalize and individualize the story to such an extent as to eliminate its typicality.
- 21. Evil and good are centered in specific individuals in the film to a greater extent than in the novel. In the novel, the "villain" is generally the implement through which evil works but the problem of evil exists outside the individual instruments of it. In 50 per cent of the films in the sample the problem of evil is reduced to one of combatting a specific villain whose defeat provides the solution of the conflict. Such a personalizing reduction of the problem is related to the personification of abstractions and the black-and-white characterization which are mentioned in 15 and 16 above.
- 22. The film frequently exaggerates characterization, setting, and action beyond the norm presented in the novel, for purposes of more dramatic and sensational presentation. Such exaggeration serves to provide the sensationalism which appeals to mass audiences, to capitalize upon the advantages the camera makes possible, and to achieve, in its more concentrated compass, effects which the novel gains through more leisurely and lengthy treatment.
- 23. The detailed presentation of costume and setting and the appearance of the stars provide the film with an air of glamour which often exceeds that conveyed by the original novel. This is in part a conscious aim of the producers, and in part an inevitable result of visual presentation. Among the sample films it occurs most frequently in period and costume stories where the richness of period detail carries with it the automatic glamour which attaches to romantic notions about the past. Among the modern films, on the other hand, only one reflects the kind of gratuitous

elegance which is popularly attributed to the glamour formula of the film.

REQUIREMENTS OF THE STAR SYSTEM

- 24. In the film versions the importance of characters portrayed by star players is increased in relation to the total plot structure and to the comparative importance of other roles as presented in the book. In deference to the star system, star roles are inflated to cater to and to flatter the name players even if this requires changes in the story material itself. Many devices are employed to build up the star roles: new action is added in which they appear; scenes they dominate are retained while scenes dominated by others are eliminated or changed; action credited to other characters in the novel is transferred to the leading characters in the film, particularly if it is pivotal action; minor characters are made more minor, and star-dominated scenes are strategically placed in the structure of the film to capitalize upon the points of greatest audience attention.
- 25. Stereotyping of character portrayal in the minor roles occurs more frequently in the adaptations than in the novels. The novelist may use as much time as necessary to create well-rounded studies of all his characters, both major and minor. The screen writer, in order to eliminate the necessity of devoting too much of his limited film space to players below the rank of star, often reduces the supporting roles to stereotypic portrayals which will immediately establish the characters in the mind of the audience.
- 26. Physical characteristics of the leading characters in the book-films are like those of the stars who portray them rather than like those described by the novelist. Casting for leading roles appears to be more by type than by specific physical characteristics, and the indefinite description provided in so many of the novels allows considerable latitude in many instances. The emphasis in the films in the sample is on general character definition (see 39 below); the appearance of the stars is seldom altered very drastically from that which has won them their "fan" following.

DEFERENCE TO PRESSURES OUTSIDE THE INDUSTRY AND THE MEDIUM

- 27. While action is increased in the film adaptations (see 5 above) the proportion of violence, brutality, and sadism is reduced in comparison to their incidence in the novels. Seven of the films in the sample invent scenes of violent action which are not in the original novel, but in five of these cases many other instances of violence are eliminated, so that the total effect even in these films is one of reduction rather than increase in violence. Of seventeen novels which contain scenes of violence of one kind or another, only three of the films increase the incidence of violence, whereas twelve reduce it, and two retain it in identical proportion to the whole. While the vividness of filmic presentation may be greater, in terms of manifest content the films present less violence than do the novels.
- 28. Emphasis upon sex is also reduced in the films as compared to the novels upon which they are based. In the films in the sample, the treatment of sex is more circumspect than in the book, and in most cases—undoubtedly because of the restrictions of the Production Code—the sexual themes are completely omitted from the manifest content.
- 29. If evil goes unpunished or good unrewarded in the novel, the film changes the plot to show the concrete punishment of evil and at least the promise of reward to goodness. The Production Code's restriction against throwing the sympathy of the audience on the side of wrongdoing, evil, or sin is interpreted to mean that the portrayal of unpunished wrongdoing conveys automatic approval of such conduct. Hence the care with which "justice" is meted out in every one of the films in the sample regardless of the action in the original novel.
- 30. Obscenity, profanity, vulgarity, and "bad taste" are not transferred to the screen even where they are integral parts of the

plot or characterization. The rules of the Production Code apply rigidly wherever questions of "taste" and delicacy arise.

- 31. Legal and religious authority are not subjected to criticism or ridicule in the films. In all instances where the sample novel attacks the law or the church, the film alters the characterization to center the object of attack in an unrepresentative individual, or eliminates the attack completely. This, too, is a regulation of the Production Code.
- 32. Film versions of books which ridicule or condemn modern business methods do not retain that aspect of the original. Although business is not listed in the Production Code as subject to special treatment, the practice in the films in the sample is to treat it with the same respect enjoined by the code in regard to religious groups and law. Where an unscrupulous business man is essential to the plot, he is presented as an individual exception rather than as a representative of his group. Where specific practice is condemned or specific abuses are exposed, the film omits the material entirely.
- 33. Social criticism is reduced, softened, or eliminated completely from the film versions of novels which attack prevailing institutions and values. While social criticism often is allowed to appear in modified form in the films in the sample, it is subordinated to plot and action and so treated as to lose its sting. Facile solutions to the problems presented, and the emphasis upon a note of affirmation (see 19 above) serve to minimize the urgency of whatever criticism is allowed to remain. In general, it is this aspect of the original which is eliminated to satisfy in part the needs of dramatic unity and condensation. Too few of the novels in the sample deal with contemporary political issues to permit generalizations, but the consistent avoidance of such issues in those adaptations which do derive from political novels would seem to indicate that politics is treated with the same diffidence that characterizes the film's treatment of other social problems.

ATTEMPTS TO REMAIN FAITHFUL TO THE NOVEL

- 34. Within the limits of its visual form, equivalents will be found in the film version for some of the stylistic devices of the novel. In no film in the sample is there a complete disregard of the original novel's characterization, incidents, or descriptive passages, and even the literary style of certain sequences is equated in terms of filmic technique. The kinds of equivalence vary with the individual film and the matter of the original novel: in some cases the words themselves are transferred to the screen intact as printed words; in some cases the descriptive matter is used as literal stage direction for the portrayed scene; in still others, a visual device is adapted which parallels in its own terms a literary device characteristic of the style of the novel.
- 35. The action which forms the main plot line of the novel is usually retained in the film version. In 80 per cent of the films in the sample, the primary action is the same as that in the book. While a novel need possess only a single basic idea or situation which is usable on the screen to make it acceptable for adaptation, that idea is generally contained in the major line of action. The changes that occur in adaptation occur within the main plot line rather than as a result of its rejection.
- 36. At least half the films based upon novels with unhappy endings will retain the unhappy ending in the screen version. Of the thirteen unhappy endings which occur in the novels of the sample, seven are retained in the film versions. The popular belief that "the movies always have to have a happy ending" is not substantiated by the sample films, although it is true that the happy ending is more typical of moving pictures than it is of standard fiction in general.
- 37. Melodramatic tricks of plotting, while congenial to the film form, are no more typical of the films than of the novels from which they are derived. Five of the films which contain a melodramatic circumstance merely carry the incident over from the

novel. In each of five other cases, several examples of happenstance, coincidence, and implausible interrelationship are completely eliminated from the film versions. Thus, while nine of the films add a single melodramatic twist to the plot which is not in the novel, the multiple use of melodramatic devices in the novels in the sample weights the balance in favor of the books for total number of such incidents. The concentrated form of the film gives a prominence to the melodrama on the screen which the greater diffuseness of the novels tends to conceal.

- 38. The title of the original novel is almost always retained by the film version even when many changes occur in the adaptation. The popular belief that the movies invariably alter a serious title to something titilating like "Purple Passion" is not borne out by the sample films. In only one instance out of the twenty-four is there a change of title from the popular short title of the novel. This is understandable in view of the wide popularity of the books in the sample; one of the reasons for selecting these particular novels for screen adaptation was the popular following they could reasonably be expected to entice into the theater.
- 39. The general broad characterization of the leading characters in films adapted from novels usually follows that of the novel. The players chosen to portray the leading roles in the films in the sample seem to have seriously attempted, for the most part, to interpret their parts along the lines intended by the novelist. Changes in the action, prompted by many other considerations, result in certain characterization changes, but, on the whole, the basic outline of character is the same, the player assuming the character of the novelist's conception rather than forcing the characterization to conform to the actor's speciality. But see 26 above, which indicates that the characterization, though basically that of the book, is generally reduced to one or two major typing characteristics, thus remaining "faithful" in a superficial sense, but impoverishing the characterization in its more profound insights.

Conclusions

It has been shown that the limitations of length dictate the omission of subplots, of conflicting interests, of complexities, relationships, and additional evidence which enrich and expand the novel. It has been shown that the theatrical nature of filmic presentation prompts a unity of action, a tightness of construction, and a concentration upon sequential arrangement that often departs from that of the novel. Consequently the film, as it exists at present, loses the wider range of interests, the complexities of motivation, the depth of analysis, the richness of illustrative and background detail, and the touches of verisimilitude which the novelist can supply. Its emphasis upon action, and therefore upon plot, results in the elimination of the philosophical implications and the thematic material which, by cinema standards, tend to be static, inactive, and nonvisual. Where commentary upon the action serves to underline its implications, the retention of the action alone is often not sufficient to carry the full significance of the novel.

Such losses are not necessarily illustrated in every translation of a book to the screen, they are not demonstrated with equal intensity in those films in which they do occur, and they do not arise out of technical limitations of the film. Cinematic devices exist—the use of visual symbols, of dialogue explanations, of literal portrayal, of personification, etc.—whereby static, subjective material is often restated in filmic terms. These substitutes may lack the subtlety of many of the literary devices which they supplant, but they can supply the essential meaning to a much wider audience.

Far more important than the technical limitations of the medium as a bar to intellectual content is the organization of the film industry which obliges it to cater to a mass audience. Created to produce mass entertainment at an inexpensive price to the consumer, the industry must appeal to the widest possible audience if it is to continue to exist. "With such universal appeal essential,

certain limitations are necessarily imposed on motion pictures. They must be moral; they must be easily understood; they must appeal to every taste; and they must be commercial." And as long as they "must" be all these things, they must also omit much of the content of the novels on which they are based.

The simplification imposed upon the adaptations, for example, is clearly a result of assumed audience intelligence more than it is of the needs of the medium. It is true that the film, moving at a set pace without providing recourse to repetition or deceleration, removes the individual spectator's power to adjust his assimilation of the material to his own understanding. But the kinds of changes which are introduced into the scripts are based more frequently on assumptions concerning audience knowledge and capacity than on the problems of clear presentation. The elimination of concepts, the reduction of complexities, the oversimplification of causes and motivations are related to the limitations of the audience, not of the medium. Whenever the novelist addresses himself to a select public who must meet him—intellectually—half way, the film dilutes the material in order to spread it thinner and over a wider range.

To "appeal to every taste" and to be "commercial," the film devotes itself primarily to pure entertainment, minimizing or eliminating the aspects of the novel which challenge and disturb. Here again, it is the deference to assumed audience preference, not adjustment to the needs of the form, that prompts such alterations. It is not that the film cannot deal seriously with serious issues, but that it generally will not.

By such omissions, the film sidesteps one of literature's most notable contributions to the minds of men: its ability to broaden and enlarge the scope of man's understanding. Great literature is not limited to telling men only what they want to hear; it has the courage to tell them what they don't want to hear; to shock and

² Charles P. Skouras, "The Exhibitor," The Annals of the American Academy of Political and Social Science CCLIV (November, 1947), 26.

agitate; to challenge and arouse; to act as a sounding board for the new, the different, and the unpopular.

This is not to say that literature, to be great, must always face up to social issues and advocate programs of reform. It is not to say that the only literature that is great is that which disturbs and incites. The consolation and solace which many of the films in the sample offer are merely a reflection of a similar spirit in the novels from which they are derived. The weakness of the films lies in the undeviating pattern of affirmation and acceptance; the mechanical optimism that does not arise out of the inner necessity of the material but is superimposed from without as a matter of practical policy. It is this formula-philosophy, into whose mold all literature must be forced to fit regardless of its original intention, that results in the impoverishment of the material when it is translated to the screen.

To a certain extent it is true, of course, that the two media can impose upon the audience only what it will accept, and that it is the audience rather than the producer which decides the quality of the fiction, literary or cinematic, which it shall have. But the mass media cannot overlook the possibility that in subtle ways they exert an influence over the audience which educates it to willing acceptance of the kind of product with which it is familiar. If the film is ever to become a true art form, its creators must accept the responsibility of the artist—not merely to reflect what his audience wants—but to teach him to want something better.

Hollywood's Foreign Correspondents

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More than 70 foreign correspondents in the Los Angeles area devote full or part time to reporting news and gossip of Hollywood for almost 2,000 newspapers and magazines and 600 radio stations in 70 foreign countries. In the summer of 1951, almost half of these correspondents filled out an 8-page questionnaire planned to reveal something of their backgrounds, and a good deal about what their problems are and how they handle the job of picturing Hollywood for readers thousands of miles away. The results of the survey indicate that the portrait which these Hollywood foreign correspondents send abroad is not different from the one painted by United States newspapers, magazines, and networks. Both are rather like an outdoor movie set—the part that shows gets the most attention.

The survey¹ of the foreign correspondents shows that 81 per cent² do interviews with stars and actors. Talks with writers and directors provide material for 61 per cent while executives are interviewed by 56 per cent. Movie reviews are written by 74 per cent, and 56 per cent handle gossip and chit-chat.

Mere scandal, however, is not popular. Forty-three per cent used the story of Judy Garland's suicide attempt in June, 1950, but of that group, one third mentioned the incident in passing, one third handled the story as straight news, and the final third tried to explain the tragedy from a sociological and psychological

¹ Conducted by mail questionnaire with a 41 per cent response.

² The foreign correspondents, of course, do not specialize in just one sort of story. They were asked to indicate in this category, what sort of stories they handle. Since all of them listed more than one, the percentages in this paragraph will total more than 100.

point of view. The story was ignored by 57 per cent. One correspondent said: "I did not even mention this attempt (if there was one) in my articles. This is the kind of 'malheurs' that I leave to the scandal hunters."

Seventy-two per cent reported that they also write about sociological aspects and problems of the motion picture industry. There are indications, however, that this percentage may reflect a misunderstanding of the term "sociological." The correspondents were asked to list the stories they had written during the previous two months. The number of articles concerned with the sociological phases of Hollywood were no more than 10 per cent of the total.

Of all the various commentators in Hollywood, the foreign correspondents are probably the only ones who are not excited about television as a source of material. Sixty-six per cent have not written anything about the young medium. Thirteen per cent—all reporters for countries which do not have or will not have television in the near future—have discussed television, but only as a curiosity. A growing interest in television was noted by 21 per cent. Canadians, who will soon have television, and Mexicans, who have it now, are particularly eager to read about the subject. Swiss and Swedish editors are also greatly interested, even though their countries have not as yet been invaded by this new form of communication.

Studio and personal publicity handouts are extremely useful to the foreign correspondents. Eighty-one per cent make use of them. Of this group, 21 per cent mentioned that they use handouts only occasionally and 17 per cent reported that the material is culled for ideas.

"I may be one of the few, but I consider studio material excellent and very useful," one writer stated. "Most of the correspondents throw press releases in the wastepaper basket because it is too much trouble to read them. But if you are patient enough to go through them, you will find good ideas. In this way I have made feature articles from simple notices, because three good lines can give you the subject of a real good column. And, as a rule, the publicists of the studios are first class newspapermen themselves."

Nineteen per cent reported, some of them emphatically, that they do not use handouts at all.

Of course, not all of the material that the foreign correspondent gathers comes from studio handouts. Eighty-three per cent get most of their news through personal contacts and interviews. Twenty-six per cent reported they get some of their material by seining the Los Angeles metropolitan papers, the trade papers, or the New York dailies for news items.

While some eschew the studio handout, almost all of them rely on the studios for the still pictures that the large majority (87 per cent) send abroad. The studios supply 83 per cent of this group with pictures whereas 17 per cent make their own arrangements for photographs.

The motion picture industry is not the sole concern of these writers. In addition to Hollywood, news of general interest is covered by 56 per cent.

The Hollywood foreign correspondents are as varied in background and training as are the many countries for which they write. Professionally, 35 per cent had previous experience in newspaper work before beginning to chronicle the cinema. Another 17 per cent listed creative writing as a previous vocation while 21 per cent have worked in various capacities in the theater and motion pictures abroad. Other past occupations include those of sculptress, model, translator, consular official, clerk, telephone operator, and teacher. In all, 35 per cent have sampled two or more careers.

Their educational histories are equally diverse. Eighty-seven per cent attended college or university. Of the 30 per cent who took graduate work, less than 1 per cent received doctor of philosophy degrees. Their specializations in college read like a university catalogue—journalism, psychology, political science,

engineering, commerce, humanities, medicine, literature, history, sociology, philosophy, philosopy, languages.

At first glance, it would seem impossible that a few more than 70 people could adequately supply 2,000 newspapers and magazines and 600 radio stations with publishable material, even from such a news-laden spot as Hollywood. However, it must be remembered that some of the Hollywood foreign correspondents work for wire services whose widespread, duplicating coverage raises the total considerably. In addition, with one or two exceptions, all of them write for more than one publication and for more than one medium. The most frequent combination of media is newspaper and magazine with 35 per cent. Twenty-one per cent of the correspondents write for newspapers, magazines, and radio, while a negligible per cent write only for radio or magazines. Another 17 per cent write for newspapers only.

While the foreign correspondents frequently mix their media, they rarely cross linguistic lines. Ninety-five per cent write in only one language. English and German are most frequently used (26 per cent each), followed by Spanish (17 per cent) and French (13 per cent).

In view of the large number of outlets for Hollywood material abroad, even subtracting the number covered by wire services, it is surprising that so few in this press corps derive their entire income from their Hollywood writing. Only 17 per cent fully support themselves as foreign correspondents. Thirty-eight per cent earn 20 to 25 per cent of their income and another 21 per cent a quarter to a half of their income from this source.

Although the reason that the majority of the accredited foreign correspondents do not or cannot derive all their income from motion picture reporting is not entirely clear, one may make certain surmises. Some, obviously, consider Hollywood reporting merely a sideline. Other contributing factors involve foreign exchange difficulties as well as the fact that free-lancing for newsprint-poor and dollar-short newspapers is not too lucrative. The difference between the professional and semiprofessional Hollywood foreign correspondent is more than economic. It is the basis for the difference between the two foreign correspondent groups in Los Angeles—the Hollywood Foreign Correspondents Association and the Foreign Press Association of Hollywood.

The Hollywood Foreign Correspondents Association is the older and the larger of the two groups, with a membership of 58. It was founded in 1941 and admits to membership any accredited professional⁸ correspondent of any newspaper or magazine published abroad, of any foreign language publication circulated in the United States, or of any radio station outside the United States or broadcasting shortwave abroad. According to the by-laws, the group was organized to promote coöperation among reporters covering motion pictures for the foreign press and radio.

In June, 1950, a group within the Hollywood Foreign Correspondents Association formed the Foreign Press Association of Hollywood. Membership qualifications are based on whether the writer derives the *major* portion of his regular income from journalism and at the same time is a paid correspondent for foreign publications. Membership now numbers between 12 and 18 (the exact number is not divulged, curiously enough). The secessionists believed that the position of the professional foreign press correspondent was being weakened because they claimed the older organization had been "taken over" by the semiprofessionals and had become too much of a social club.'

The problems involved in covering Hollywood for the foreign press are varied and of different intensity from those that beset reporters for the United States press. Generally they fall into three categories: competition, getting and presenting usable news, and lack of coöperation on the part of the studios.

³ Professional in the sense that the writer is paid for his writing.

⁴ The feeling about the professional-semiprofessional issue is strong on the part of the Foreign Press Association. According to the vice-president, Nora Laing, the president, Henry Gris, of the United Press, refused to permit his group to coöperate officially in this survey when he discovered the members of the Hollywood Foreign Correspondents Association were also being polled. Members were not, however, prohibited from participating on an individual basis.

Competition among the foreign correspondents is extremely keen, and 13 per cent noted that it was one of their special problems. In this regard, language is a determining factor. Spanish language correspondents, for instance, have much more competition than Swedish reporters. First of all, many more Hollywood correspondents write in Spanish than in Swedish. Then, too, a story in Spanish—the same story—can be sold in all but one of the Latin and South American countries as well as in Spain. The only additional effort involved is making a copy of the article and mailing it. Consequently, Spanish language reporters try to sell to all possible outlets. Swedish correspondents, on the other hand, are limited to communication media in only one country.⁵

Some correspondents also claim there is unfair competition from studio personnel. A few mentioned that some of the studio publicists write for foreign newspapers "on the side," and since they are closer to the source of the news, they enjoy an advantage over the foreign representative.

In addition, the correspondents complain that the studios and their releasing agencies abroad will by-pass the Hollywood correspondent and supply their newspapers with special articles and pictures if their editor requests. This procedure diminishes their chances of selling articles. The two correspondents' associations have been trying to solve this problem, and the Foreign Press Association has worked out a tentative plan with the major studios whereby a studio will refuse a request for a special story if the paper has a correspondent in Hollywood.

Thirty-five per cent reported problems in the getting and presentation of news appropriate for their audience. Foreign movie-goers apparently prefer to read about their favorites—personalities not always of similar newsworthiness in the United

⁶ Article 12 of the Hollywood Foreign Correspondents Association Code of Ethics, however, states: "It is considered unethical for any correspondent seeking new outlets for his material to try and take over space allotted to another member of our association. Before accepting a new publication, a correspondent must check with the Association to make sure that the said publication is not already represented. If the publication is being represented, then the correspondent must obtain permission from the publication's present correspondent before taking further action."

States. Foreign releasing schedules are another complicating factor. As one correspondent put it: "The main problem seems to be to find material of special interest to European readers, to pick the stars they like and the pictures they are going to see, as quite a few of the American movies are not shown in Europe."

As for the presentation of the material, a few correspondents feel that they have difficulty in creating a true picture of the film capital. Specifically, one said his problem is "to avoid picturing Hollywood as a 'glamour place.'" Another listed "trying to make European people see Hollywood people as Hollywood people see themselves." The main problem of another is "to write about movies without becoming an unpaid publicity agent of the studios." Still another said his predicament is "avoiding anything in the sexy angle and yet getting something interesting to write about."

Charges of a lack of coöperation on the part of the studios were made by 26 per cent, emphatically and sometimes bitterly. A correspondent for the Spanish-speaking areas complained: "In spite of the fact that Mexico City, for instance, contributes far more money than does Los Angeles to the American movie industry, the local columnist is treated with more consideration than the representative of the Mexican press, who besides being a correspondent, could also be considered a diplomatic representative in a sense. He interprets not only the words of the movie stars, but their actions, so that when told to the reading public, across the borders of the various lands, a wrong impression is not created. A newspaperman from Cucamonga, let us say, if he writes in English, is considered more important to the studios and its artists as a general rule, than the representatives of publications of the Spanish reading public, not taking into consideration the fact that, in the entire world, there are over 178 million persons who speak Spanish."

The scheduling of previews is also criticized by some. "Previews are only too often 'afterviews." Some studios make it a habit to

show movies some days after they can be seen in any Hollywood theater and sometimes weeks after the first showing in New York City." A correspondent for Turkish publications commented: "There is not sufficient coöperation from the studios. We are often invited to preview movies after they have already been released locally. We are not being given enough of an opportunity to meet the directors and watch the movies in the making."

This charge of lack of opportunity was explored further by another writer who reported that although he had never been refused a favor when he asked, little is volunteered by the studio. "All the initiative had to come from my side. Very little guidance and real help was offered by the initiative of the studios. I have found it much easier to collaborate on assignments with such industries as the aircraft industry. Even government bureaus are nowadays much more helpful towards the foreign correspondent than the publicity offices in Hollywood."

Actually, from an American newspaperman's point of view, the complaint that the studios are uncoöperative because they do not take the initiative points up the fact that the majority of the Hollywood foreign correspondents do not have a newspaper background.

Again from the American standpoint, the admission that some of the correspondents get their news from trade papers and Los Angeles and New York dailies is interesting. American newspaper tradition and training requires that a newspaperman gather facts himself and the opposite practice is a reflection in part of the European newsman's attitude that the facts and how they are obtained are not as important as the use made of them.

⁶The studios apparently also make a distinction between the professional and semiprofessional correspondent. The director of the foreign department of one of the major studios said that some of the professional foreign correspondents enjoy the same privileges and receive the same consideration as the domestic correspondents. He admitted that scheduling and space problems force the showing of many of the newest pictures to the foreign reporters after they have been released locally. Because pictures are exhibited so much later abroad, the foreign correspondents, he explained, do not have to see them as soon as does the local press.

On the whole, the foreign readers are getting the same stardusted image of the Hollywood scene as does the American public. The foreign correspondents, because most of them are not under the pressure of turning out daily pieces, have an opportunity to approach their subject with depth and perception. This survey indicates that they are ignoring their opportunities—the majority of exported Hollywood news deals in interviews, reviews, and chit-chat.

Critics and commentators of Hollywood, including the foreign correspondents, often criticize the industry for making pictures which give foreign countries a distorted impression of Hollywood and American life. As a group, the foreign correspondents are in no position to join in the criticism, for their writings do very little to place the American motion picture industry in proper perspective.

A Selected and Annotated Bibliography in Communications Research

FRANKLIN FEARING AND GENEVIEVE ROGGE

In Place of the usual reviews of current books and articles, the editors present a selected bibliography in communications research prepared by the *Quarterly*'s book editor, Franklin Fearing, in collaboration with Genevieve Rogge, research assistant. Initially the editors of the *Quarterly* planned to publish an annual bibliographical supplement. For a number of reasons, chiefly financial, only one such supplement (Vol. I, 1946) has appeared. While the present bibliography has a different format and a more limited scope than that presented in 1946, it follows it in point of time, covering the period from 1946 to 1951. The items in the present listing are selected from a comprehensive bibliography of the communications field being prepared under Professor Fearing's direction.

The bibliography presented herewith is divided into two parts. The first part contains rather detailed abstracts of a small number of important recent investigations. In the second part are listed titles covering a wider range of topics and a longer period of time. The titles in the second part are grouped under the headings Research and General.

A bibliography such as this is selected not only in the sense that it reflects the values and critical standards of its compilers, but it was prepared within the limits of the following formal restrictions.

It is primarily concerned with the methods, theory, and results of empirical investigations of the content of communications, effects of communications, communications situations and media, and communicators. Although Section II, entitled General, lists books and articles which, strictly speaking, do not report the results of empirical research, these either discuss the problems and implications of contemporary communications research or give the climate within which such research is conducted.

"Basic" research is emphasized rather than "applied" research. Although this distinction is not always easy to make, it means that, in general, the investigations listed are concerned with the methods and results of testing hypotheses regarding communications content, effects, situations, or communicators rather than researches of the so-called "market" or "administrative" type.

The investigations and general discussions covered in the present lists are concerned with empirical studies or the implications of empirical studies. This means that books and articles on production techniques, audiovisual techniques, teaching manuals in film, radio, and TV, the economic, aesthetic, or engineering aspects of the communications industries, and historical studies were excluded. Also excluded is the extensive literature in several areas closely related to communication. Examples of such exclusions are the large and important literature on public relations, propaganda, and public opinion, the psychological investigations of the relation between signs and symbols and thought processes, and the theoretical and applied studies in semantics. These and other areas would properly be represented in a more comprehensive communications bibliography.

With a few exceptions the period covered is 1944 to 1951. The bulk of the items were published after 1945.

The assignment of items to particular categories was to some extent arbitrary, since many of the citations could with logic have been placed in more than one classification.

PART I

Audience and Effects Analysis

Cantril, Hadley, Hazel Gaudet, and Herta Herzog. Invasion from Mars. Princeton University Press, 1940. In part reprinted in Readings in Social Psychology, Holt, New York, 1947, pp. 619-628.

The purpose was to study audience response to Orson Welles' radio program, "Invasion from Mars." On October 30, 1938, thousands of Americans became panic-stricken by a broadcast which described an invasion of Martians which threatened our whole civilization.

Procedure. Following the broadcast, interviewers gathered hundreds of accounts from panicked and nonpanicked listeners.

Results. The listeners were classified as follows:

Those who checked the internal evidence of the broadcast. These did not remain frightened because they could discern that the program was fictitious.

Those who checked the broadcast against other information and learned it was a play. As in the first group, they were suspicious of the "news" they were getting and checked it against some other information, e.g., the daily radio log in the newspaper.

Those who tried to check the program against other information but who, for various reasons, continued to believe the broadcast was an authentic news report. The type of checking behavior was quite unreliable, e.g., looking out the window.

Those who made no attempt to check the broadcast or the event. These interpreted the situation to be such that there was no need to check, e.g., they were sure the program was real.

From this, and other interview data, the authors *conclude* that the panic behavior was due to the enormous felt ego-involvement created by the situation and to the complete inability of the individual to alleviate or control the consequences of the "invasion." Panic was inescapable.

Coffin, Thomas E. "Television's Effects on Leisure-time Activities," J. Applied Psych., 1948, 32:550-558.

Procedure. One hundred and thirty-seven TV-owning families and 137 non-TV families living on Long Island were interviewed during a sample week in May, 1948. The TV and non-TV families were similar as to area of residence and socioeconomic status. The families were questioned as to how many times they had gone to the movies, how much they had read, listened to the radio, and participated in other leisure-time activities during the sample week.

Results. TV families reported an average of 24.4 hours of viewing during the sample week, and averaged 2.5 hours more for new (owned set less than six months) than for old owners. Set usage was slightly higher in the upper economic brackets. There was an average of 3.56 viewers per set, as compared with 1.9 nighttime radio listeners in these same families.

Total participation in out-of-home activities, e.g., movie and sports attendance, was 24 per cent less for TV families. In the non-TV groups there

were 61.6 movie attendances per 100 persons for the sample week, while in the TV group there were 49.2 attendances per 100—that is, 20 per cent decline in the TV group. Also 13 per cent of the TV group report they enjoyed movies less since having TV.

For the TV families, inside the home there is also a decrease in the proportion of time devoted to activities other than viewing—with nighttime radio listening declining most (68 per cent decline), daytime listening next (26 per cent decline), and amount of reading dropping off the least (18 per cent decline).

Opinion of TV in general: "wonderful," 55 per cent; "good," 37 per cent; "fair," 6 per cent; "poor," 1 per cent; "disappointing," 1 per cent. These ratings hold for both old and new owners.

Cooper, Eunice, and Helen Schneider. "Don't Be A Sucker: A Study of an Anti-discrimination Film," Pub. Opinion Quart., 1951, 15:243-264.

The purpose was to study the effectiveness in changing attitudes of the dramatic film "Don't Be A Sucker" which is concerned with the futility of intergroup prejudice. Besides the general message (prejudice is a device used by agitators to dupe you; you lose in the end) which appealed to enlightened self-interest, there were also specific messages beamed at specific target groups—namely, Catholics, Protestants, and Jews.

Procedure. Group interviews were conducted with adults and individual interviews with high school students—all of whom had been exposed to the film. Also, a written questionnaire measuring prejudice was given to two groups of high school students who were similar except in one respect:—one group (experimental) had seen the anti-discrimination film, while the other (control) group was shown a travelogue.

Results. The film was most successful in routing specific "messages" to specific target groups. Comparison of the attitudes between the control and experimental groups showed that in general American Catholics got the message that German Catholics were persecuted under Hitler as much as Jews; and American Protestants perceived the message that Hitler had not helped the German majority. Furthermore non-Catholics in the experimental group were not impressed by the message intended for Catholics nor did the non-Protestants who saw the film get the message about the German Protestant majority.

There was much evidence of "boomerang" effects (a message has effects opposite to those intended by the communicator) of some of the messages. For example, the message intended for minorities (if you protect the rights of others you will find in this unity the strength to eliminate discrimination) was sometimes perceived by the majority group as evidence that divide-and-conquer techniques will not work in the U. S., i.e., it was "misperceived."

Herzog, Herta. "What Do We Really Know About Day-time Serial Listeners?" Radio Research 1942-43, Duell, Sloan and Pearce, New York, 1944, pp. 3-23. Reprinted in Public Opinion and Communication, Free Press, Glencoe, Illinois, 1950, pp. 352-365.

Purpose and Procedure. This article examines the structure of the radio daytime serial audience. The results cited are drawn from four studies, including a nation-wide survey of nonfarm women, a study of a cross section of the Iowa population, a study of a cross section of Erie County, Ohio, and finally, a study based on interviews with women in Syracuse, Memphis, and Minneapolis.

Results. The data do not support the opinion that daytime serial listeners are more isolated socially than nonlisteners. There are no significant differences between the two groups as to amount of social participation, e.g., attending church affairs, movies, etc.

Several measures suggest that the daytime serial listener is less equipped than the nonlistener to provide a wide range of intellectual experience, e.g., nonlisteners have more formal education and are more likely to live in an urban area.

According to interviewers' ratings of personality characteristics, the daytime serial listeners appear to be slightly less energetic and self-assured. However, the two groups do not differ significantly in outward signs of emotionality or in their own appraisal of the extent to which they worry.

Listeners and nonlisteners differ most conspicuously in their attitude toward radio. Daytime serial addicts listen more to the radio during the evening and prefer the radio to newspapers as a source of news. This holds true for all educational levels.

Hovland, Carl I., Arthur A. Lumsdaine, and Fred D. Sheffield. "Short-time and Long-time Effects of an Orientation Film," *Experiments on Mass Communication*, Princeton University Press, 1949, pp. 182–200. In part reprinted in *Public Opinion and Communication*, Free Press, Glencoe, Illinois, 1950, 438–447.

The purpose was to determine the extent to which "short-time" (five-day) effects of an orientation film persisted after a nine-week interval. The film, "The Battle of Britain," sought to establish confidence in the integrity and fighting ability of our ally, Britain.

Procedure. A "before" questionnaire (mainly opinion items about Britain's role in the last war) was given to ten U. S. Infantry training companies. Five of these were then shown the film. Five (control group) did not see it. Five days after the showing three each of the control and experimental companies took an "after" questionnaire (both fact-quiz items on the film and opinion items) and nine weeks after the film the remaining companies took the "after" questionnaire.

Results. Fact-quiz items: All of these items showed a decrement with time, i.e., a larger amount of the material was forgotten after nine weeks than after one.

Opinion items: In contrast with the above, some of the items showed reliable increments (were remembered better) after nine weeks than after one week, while other items showed the expected decrement. For example, "RAF gave Nazis first real defeat" was remembered 17 per cent less after nine weeks than after one; while "British are doing their fair share of the fighting" was remembered 14 per cent better after nine weeks than after one week.

The authors *conclude* that changes in opinions of a general rather than specific nature may show effects with lapse of time. "Sleeper" effects are probably obtained among individuals already predisposed to accept an opinion.

Kendall, Patricia L., and Katherine M. Wolf. "The Analysis of Deviant Cases in Communications Research," *Communications Research* 1948–49, Harper and Bros., New York, 1949, pp. 152–179.

The *purpose* was to discover the process through which readers misunderstood the message of a series of antiprejudice cartoons.

Procedure. One hundred and sixty white, non-Jewish men from working class backgrounds were interviewed in detail about their understanding of the cartoons and their reaction to the central character, "Mr. Biggott." In each of the three test cartoons, Mr. Biggott is shown as a cantankerous and unattractive man of middle age and moderate income, who displays antiminority attitudes or prejudice.

Results. Analysis of the interviews showed the cartoon message was interpreted in three different ways: Thirty-six per cent of the sample correctly understood the general message that prejudice is foolish; 31 per cent misunderstood the general message by not recognizing either the reference to prejudice or the satire of it; and 33 per cent misunderstood by believing that the cartoons were designed to create racial disturbances. The authors explain this as follows: Subjects who were themselves not prejudiced and who showed awareness of the prejudice problem were predisposed to understand the cartoons; while subjects who were themselves prejudiced were predisposed to misunderstand because understanding would mean threat to, and ridicule of, their self-image.

Analysis of the deviant cases (those who departed from the above pattern) showed: Most of the twenty-one subjects who were prejudiced and yet correctly understood the cartoons were able to do so either because they had no guilt feelings about their prejudice (thus understanding did not bring threat or ridicule), or because, among the boys, they could liken Mr. Biggott

to their fathers and then reject parental authority; and two subjects who were unprejudiced and aware but who misunderstood the cartoons probably did so because of intellectual and language handicaps.

Ricciuti, Edward A. "Children and Radio: A Study of Listeners and Nonlisteners to Various Types of Radio Programs in Terms of Selected Ability, Attitude, and Behavior Measures," *Genetic Psych. Monographs*, 1951, 44:69–140.

Procedure. Data were secured on 3,125 Connecticut school children from grades 5, 6, 7, and 8. Their listening habits were ascertained and correlated with age, IQ, scholastic achievement, degree of happiness, and personal-social adjustment. A smaller sample (30 per cent of the total) was used to study the relation between listening habits and fears, nervous habits, and daydreaming.

Results. Comedy-variety and crime drama programs were the most popular among boys as well as girls. Over 90 per cent indicated that they listened to such programs.

The relative popularity of programs among boys, in descending order, was: comedy-variety, crime drama, anticrime, daily adventure, quiz, drama, modern music, sports, news, soap opera, educational, miscellaneous, and classical music.

Program popularity among girls was: comedy-variety, crime drama, modern music, drama, anticrime, quiz, soap opera, daily adventure, news, educational, miscellaneous, sports, and classical music.

Children are less interested in exciting programs with an openly expressed "crime-does-not-pay" approach than they are in the straight murder mystery.

No important differences between listeners and nonlisteners to crime drama, anticrime, and daily adventure programs were found in measures of nervous habits, fears, and daydreaming.

The percentage of listeners included in each category revealed, in general, more pronounced sex than grade differences.

The author *concludes* that anticrime, daily adventure, modern music, and soap opera programs do not seem to give anything positive to the listeners, but neither are they harmful.

Warner, W. Lloyd and William E. Henry. "The Radio Day-time Serial: A Symbolic Analysis," *Genetic Psych. Monographs*, 1948, 37:3-71. In part reprinted in *Public Opinion and Communication*, Free Press, Glencoe, Illinois, 1950, pp. 423-437.

The *purpose* was to study the Big Sister radio program (chosen because it has one of the largest audiences among daytime serials) and its audience.

Procedure. Interviews were conducted with listeners both during and after a broadcast of the program. The subjects also took the Thematic Apperception Test and answered a questionnaire on social characteristics.

Results. Content of the program: The characters are upper-middle class men and women. The basic theme is that the good women (wives and mothers) are invincible; and the spartan, restrictive virtues of American middle-class morality are praised and rewarded.

The program functions to identify the audience with the characters in the plot. That is, the drama expresses the hopes and fears of its audience. "Everything in the world" is centered within the focus of Big Sister's uppermiddle class family. As for its psychological functions, the listeners feel the program provides them with techniques for solving interpersonal problems and the program increases the listening woman's feeling of importance by showing that the family is of the highest importance and that the woman has control over family life.

Social characteristics of the audience: The women who listen are normally distributed through the socioeconomic levels and belong mostly to the Common Man social level. At this level usually the woman is economically dependent on her husband, the world beyond the family is outside her sphere of action though it threatens her, and her security and that of her children is dependent on the husband.

Wiese, Mildred J., and Stewart G. Cole. "A Study of Children's Attitudes and the Influence of a Commercial Picture," J. Psych., 1946, 21:151-171.

The purpose was to examine the information and beliefs held by youth about the Nazi and American ways of living, and to note the effects on these beliefs of a film, "Tomorrow the World." This film is the story of an American college professor who adopts a 12-year-old Nazi orphan boy, Emil. In a few days Emil manages to disrupt the family, antagonize the community, and attempts to murder the professor's daughter. The intervention of the professor's Jewish fiancé saves Emil. The picture poses the problem of what should be done with Emil as a prototype of Hitler youth.

Procedure. Approximately 1,100 school children from grades 7 to 12 representing all socioeconomic levels and varying cultural backgrounds were the subjects. Both before and after seeing the film the subjects answered short essay questions on information and attitude about the Nazi and American ways of life, as well as questions on problems in the film.

Results. In general the students were familiar with the American ideas of liberty, justice, and equality and they believe the democratic American way is the best possible one.

Though there was a small amount of change in attitude and information, in general the film seems to have confirmed the majority of students,

particularly those culturally privileged, in an emotional and nondiscriminative estimate of the American social and economic scene. It also appears to have softened the students' judgment of the severity of the Nazi regime.

Subjects' responses differ strikingly in keeping with the contrasting kinds of economic and cultural backgrounds. For example, when asked what should be done with Emil, the upper-class children treat Emil as a case study and trust the powers of reason, e.g., education, to redeem him; whereas Mexican, Negro, and other underprivileged children approach Emil as a gangster and suggest camaraderie as a corrective method (a more realistic approach according to the authors).

Wilner, Daniel M. "Attitude As a Determinant of Perception in the Mass Media of Communication: Reactions to the Motion Picture, *Home of the Brave*." Unpublished doctoral dissertation, University of California, Los Angeles Library, 1951.

The purpose was to determine the effect of attitude, in particular prejudice, on perception of the film *Home of the Brave*.

Procedure. This film, dealing with Negro-white relationships among soldiers on a dangerous mission, was shown to five groups, consisting of from 45 to 150 subjects each. Before the film, each subject took a question-naire designed to measure prejudice toward various minorities. During the showing, the film was stopped at seven points; and at such places the subjects were questioned as to what they had just seen. The responses of those who were high, middle, and low in prejudice (in terms of scores on the questionnaire) were compared.

Results. The high, middle, and low prejudice groups differed significantly in their judgments of the meaning of certain facial expressions of the characters, and the motivation they imputed to particular characters in certain scenes. These groups also differed significantly in their emotional reaction to characters and actions and in their statements as to "what they would have done" in a certain film situation.

The author *concludes* that the attitude organization of the individual is an important determiner of social reactions which are largely perceptual at their core.

Wolf, Katherine M., and Marjorie Fiske. "The Children Talk About Comics." In *Communications Research 1948–49*, Harper and Bros., New York, 1949, pp. 3–50.

Procedure. Detailed interviews were held with a sample of 104 children, carefully stratified with respect to age, sex, and economic status. Each subject was asked about his comic-reading habits and social adjustment and was also observed while reading a Superman story.

Results. Three clear stages in comic reading were found. The first is the "funny animal" stage, e.g., Walt Disney comics, in which animals have human characteristics and do homey, realistic things. The second is the "fantastic adventure" in which the characters look like humans but have supernormal powers, e.g., Superman or Captain Marvel. The third is "true and classic" comics, e.g., book adaptations or other factual material are put in comic-strip form. In the "normal" child these coincide with developmental stages—the youngest children prefer "funny animals," the 11 to 12-year-olds prefer "fantastic adventure," and those over 12 years prefer "true or classic" comics.

Three types of comic readers were found: the moderate readers (46 per cent of the children) who enjoy comics as a pastime, the indifferent or hostile readers (17 per cent) who find comics "unreasonable or trite," and the fans (37 per cent) who prefer by far the "fantastic adventure" comics with an invincible hero. The fans were found to be "neurotic" in that comic reading engulfs their whole life. They are interested only in the general aura of the story (especially its triumphant end) and they lift comic reading to a position superior to other activities, including eating. The children were classified as to their social adjustment and it was found that 50 per cent of the "neurotic" children are fans. The authors conclude that the child's problems were there before the comics came along to relieve him. For "normal" children the comics function as an adaptation mechanism and satisfy real developmental needs.

CONTENT

Asheim, Lester, "From Book to Film." Unpublished doctoral dissertation, Graduate Library School, University of Chicago, 1949. In part reprinted in the Hollywood Quart., 1951, Vol. V, pp. 289–304 and 334–349, and The Quarterly of Film, Radio and Television, Vol. VI, pp. 54–68. Also reprinted in part in Public Opinion and Communication, Free Press, Glencoe, Illinois, 1950, pp. 299–306.

The purpose is to make an objective, quantitative comparison of the content of 24 classic and "standard" novels and the corresponding 24 films based upon them, to determine what happens when a book is adapted to the screen.

Procedure. The film was seen and its content analyzed and compared with the corresponding book.

Results. Despite the film's emphasis on action, description is not lost when the book is adapted to the screen. The film follows normal chronological sequence more closely than the novel. Though action is increased in the film versions, the amount of violence, brutality, and sadism is reduced in comparison to their incidence in the novels. Though many

changes may be made in the adaptation, the title of the novel is almost always retained in the film.

Carpenter, C. R., and associates. Reports of the Instructional Film Research Program, Pennsylvania State College. Approximately 28 reports have been issued since 1948 covering a large number of research projects. Mimeographed.

In these studies both the film content and other factors are experimentally varied. The following is a sampling of the results of these investigations.

The findings lend support to the proposition that established attitudes toward a film's main character and theme are important in the process of learning and the restructuring of attitudes.

Both audio and video elements of films are effective channels of communication. Each channel is uniquely capable of conveying certain types of information. However, since both channels together are more effective than one alone, the object should be to achieve the best possible integration of the video and audio elements of films.

In teaching knot-tying tasks by means of instructional films, some verbal descriptions of the acts assist the learner, but verbalization may be increased to a point where it actually interferes with learning.

A film is more effective in teaching a skill if the task is portrayed from the viewing angle of the learner as he will perform the act.

Data indicate that packing more and more information into a film yields only very slight increments in total measured learning.

Repetition of a film resulted in greater learning. However, this contribution fell off rapidly after the first repetition.

Johns-Heine, Patricke, and Hans H. Gerth. "Values in Mass Periodical Fiction, 1921–1940," Pub. Opinion Quart., 1949, 13:105–113.

The purpose was to make content analyses of five important American magazines for the period 1921 to 1940, with special reference to the hero models and plot themes, as value indexes.

Procedure. The content analysis schedule included the following items: occupation, age, and personal characteristics of hero and heroine; setting of the story; and plot summary.

Results. In 1931 to 1940 as contrasted with 1921 to 1930, the general shift was away from the portrayal of the hero as a businessman or "titan" to his portrayal as a professional man.

The most frequently appearing theme or basic appeal in the women's magazines is that of "love," e.g., a successful marriage. This is true for both decades.

Striking changes in the typical American success themes were found. In the Saturday Evening Post, for example, in the period of the 1920's the reward symbol for the success theme is typically that of social ascent; but in the 1930's it is recognition or deference from others. This also shows a shift away from the "titan" success theme; and in the second period a different hero model begins to emerge—namely, the industrial worker.

The main feature of the story settings is their nondescript character, for the largest number of stories occur in an undesignated locale. The most frequently named locale is the metropolis.

Mott, Frank Luther. "Trends in Newspaper Content," Mass Communications, University of Illinois Press, Urbana, 1949, pp. 337-345.

Procedure. Tabulations of the number of columns of space devoted to different topics, ranging from foreign news to comic strips, were made for ten prominent newspapers in New York, Chicago, Philadelphia, Boston, and Baltimore for the first week each of 1910, 1920, 1930, and 1940.

Results. War and foreign news: During the fifteen years prior to World War I the average metropolitan daily carried from one to six columns of foreign news every day. This tripled and quadrupled during the war, never dropped to former levels, and increased as the second world conflict developed.

Sports news increased slowly, but steadily, over many years. By 1940 the big papers were printing about twice as many columns of sports as they had twenty years earlier.

Comics and news pictures: The increase of these is great. Almost half the papers measured in 1910 carried no comic strips. By 1920 the average amount of comics had doubled, and by 1930 the average was five columns. In 1940 the space devoted to comics was double that of ten years earlier.

Society news and women's interests have been on the increase since 1930, and Washington correspondence and the financial section have increased in recent years.

Silvey, Robert. "The Intelligibility of Broadcast Talks," Pub. Opinion Quart., 1951, 15: 299-304.

Procedure. Groups of army recruits were exposed to fifty Armed Forces Educational Broadcasts between January and May, 1950. Immediately after each broadcast the subjects were asked to rate the program as easy or difficult to understand, interesting or dull, and to write down as much as they could remember of the main points.

Results. Listener understanding of the broadcasts was found to be directly related to the listener's educational level.

Among the factors which made for intelligibility of the broadcasts were: a limited number of themes, clear summaries, lucid and lively style, concreteness of subject and treatment, and clear illustrations of principles and abstract points.

Listeners' understanding of a broadcast is also profoundly influenced by the extent to which they are interested in the subject, or have their interest in it aroused. Intelligibility was found to depend much more upon "interestingness" than upon any factor of style or language.

Wolfenstein, Martha, and Nathan Leites. "An Analysis of Themes and Plots in Motion Pictures," Annals Amer. Academy of Pol. and Soc. Sci., 1947, 254:41-48. Reprinted in Mass Communications, University of Illinois Press, Urbana, 1949, pp. 346-357.

Procedure. Content analyses were done of 67 Hollywood movies released in New York between September 1, 1945, and September 1, 1946—all were grade-A movies with a contemporary American urban setting.

Results. A major tendency in the treatment of "love" is to combine the appeal of the conventional and the unconventional in a single relationship. There is a marked preference for showing the first meeting as a self-introduction, frequently occurring between the hero and heroine in complete isolation, or in an impersonal milieu surrounded by strangers. But the couple are less likely to be left alone at the end. Where three out of four couples introduced themselves, there is only a fifty-fifty chance that they will be alone at the end. Relationships which have started in an unconventional manner do not develop into anything secret or hidden.

The combination of sacred and profane love in the same relationship is one of the major themes of American films. The image of a "good-bad girl" has been created. After her apparent badness has been established, it is explained later as a false impression; and the hero is left with a loving girl whom he can marry. This is contrasted with European films which seem to maintain separation of good and bad women.

COMMUNICATORS

Berelson, Bernard, and Sebastian DeGrazia. "Detecting Collaboration in Propaganda," Pub. Opinion Quart., 1947, 11: 244-253.

The *purpose* was to determine whether Berlin and Rome were collaborating in short-wave radio propaganda beamed to this country.

Procedure. Content analyses of broadcasts from Radio Rome and Radio Berlin were made.

Results. Attention to specific events: the amount of attention (per cent of broadcast time) given by the two transmitters was studied on five different occasions (including one Churchill and two Roosevelt speeches) and the

following was true of all of them: Rome responded first, said more, and continued longer than Berlin.

Allocation of total broadcast time: There was a certain amount of correspondence between Radios Rome and Berlin as to amount of broadcast time allocated to various war topics.

Identification of the self: Comparison of percentages of self-references by the two radios showed marked differences. For example, broadcasts made in reply to one Roosevelt speech showed that 96 per cent of the references made by Radio Berlin were to "Germany," with only 4 per cent made to the "the Axis"; but for Radio Rome, 77 per cent of the references were to "the Axis," 1 per cent to "Italy," and only 22 per cent to "Germany."

The authors conclude that, contrary to the popular belief that the Axis countries coördinated their propaganda consciously and carefully, there was neither general nor specific correspondence between Radios Rome and Berlin. The strong probability is, therefore, that no collaboration existed.

White, Ralph K. "Black Boy: A Value-analysis," J. Abnorm. Soc. Psych., 1947, 42: 440-461.

The purpose was to analyze the personality of Richard Wright through a study of his autobiography, Black Boy.

Procedure. Content analyses of Wright's book and the written autobiographies of eight college students were made. The analysis of the Wright material was compared with that of the students.

Results. Eighty-nine per cent of the description of other persons in Wright's book is disapproval, as compared with 40 per cent in the students. Seventy-nine per cent of Wright's description of Negroes is unfavorable.

One hundred per cent of Wright's descriptions of his father, and 87 per cent of his descriptions of his mother are disapproving, as compared with 48 per cent parental disapproval on the part of the students.

Sixty-five per cent of all self-description is unfavorable, as compared with 42 per cent in the students.

Eight per cent of Wright's explicit value judgments were openly admitted aggressive impulses, as compared with 1 per cent for the students. For Wright, this value ranks second, with physical safety first.

Four social values—sex love, family love, friendship, and pleasant personality—are given only 4 per cent of the total emphasis in *Black Boy*, as compared with 24 per cent in the students.

The author *concludes* that Wright's identification with Negroes is less complete than had been assumed; and the chief adult-sponsored values in Wright's psychological environment were obedience, purity, and religion. He did not internalize any of these to a significant extent, but did partly internalize the values of the "gang."

COMMUNICATION SITUATION, USE OF MEDIA

Asheim, Lester. "Portrait of the Book Reader as Depicted in Current Research," Mass Communications, University of Illinois Press, Urbana, 1949, pp. 424-429.

Purpose and Procedure. This article surveys the recent literature.

Results. The better educated read more books. Younger adults read more books than the older; those with higher economic status more than those with lower; urban dwellers more than rural. All these are related to some extent with the education factor.

Comparison of book reading to the other major forms of communications shows the following: about 25 to 30 per cent of the population read one or more books a month; about 45 to 50 per cent see a motion picture once every two weeks or oftener; about 60 to 70 per cent read one or more magazines more or less regularly; about 85 to 90 per cent read one or more newspapers more or less regularly; about 90 to 95 per cent listen to the radio 15 minutes a day or more.

Book readers use the other communication media more than those who do not read books. This holds for every medium of communication except radio. Book readers are more critically minded persons, so far as the communication media are concerned. They are more likely than are the non-readers of books to be dissatisfied with newspapers, magazines, and radio. These differences between readers and nonreaders hold when the education factor is controlled.

Baker, Kenneth. "An Analysis of Radio's Programming," Communications Research 1948-49, Harper and Bros., 1949, pp. 51-72.

Procedure. The program logs of a sample of radio stations were analyzed. The sample was drawn from commercial AM stations within the U. S. which were members of the National Association of Broadcasters.

Results. Radio is primarily musical. Nearly half its time is consumed by predominantly musical programs. Dramatic programs rank second in radio programming when measured by the number of minutes consumed. Sixteen per cent of radio's time is given to this type of program, and about 6 per cent of it is taken by the daytime serial. In third place in terms of amount of time are programs of news and commentators.

About one third of radio's time is not sponsored; another third is consumed by sponsored network programs; approximately one fourth is sponsored by local retail and national spot accounts; and the remainder is used by programs with multiple sponsorship.

Berelson, Bernard. "What Missing the Newspaper Means," Communications Research 1948-49, Harper and Bros., New York, 1949, pp. 111-128.

The purpose was to study "what missing the newspaper means" to its readers during the strike of eight major New York City newspapers during June, 1945.

Procedure. A small number of intensive interviews (60 in all) was conducted on a sample of readers, stratified by rental areas in Manhattan. The sample provided a good distribution by economic status though it was high in education.

Results. There seems to be an important difference between the respondents' specific habits in newspaper reading and their general protestations of interest in the newspaper's "serious" purposes. Interviews showed the following types of functions of the newspaper. For information about and interpretation of public affairs: A core of readers find the paper indispensable as a source of information. As a tool for daily living: Some can't function without it, e.g., they need the daily radio log, financial section, advertisements. For respite: The paper provides an "escape" from personal care. For social prestige: The paper allows some to appear informed in social gatherings. For social contact: Human interest stories, personal advice column, and the like provide readers with "personal" contact with distinguished people.

Desirability of reading: There is some interview evidence that reading itself regardless of content is a strongly and pleasurably motivated act in urban society.

The author concludes that the newspaper is missed because it serves as a ("non-rational") source of security in a disturbing world and because the reading of it has become a ceremonial or ritualistic act for many people.

Lazarsfeld, Paul F. "Communication Research," Current Trends in Social Psychology, University of Pittsburgh Press, Pittsburgh, 1948, pp. 218–274. In part reprinted in Public Opinion and Communication, Free Press, Glencoe, Illinois, 1950, pp. 337–346.

Purpose and procedure. Some of the current literature is reviewed in order to present some of the facts about audience behavior to each of the mass media, as well as interrelationships among audiences for the various media.

Results. People who listen to radio news commentators are more likely to read news magazines, and, in smaller towns, to subscribe to the Sunday metropolitan newspapers. People who read the more serious type of magazine tend to listen to the more serious type of radio program. Women who are interested in the "true fiction" type of magazine tend to be more interested in daytime serials and prefer the romantic type of movies. People who

never see a movie are likely to listen less to the radio. If a book has been adapted to the screen, those people who have read the book are more likely to see the movie and vice versa. In all media, women show less interest in public affairs. In general women read fiction in magazines while men are more inclined to read nonfictional material. Women provide the vast majority of the daytime radio audience. The audience for "light entertainment" is mainly drawn from the younger age groups. Lower educated people don't like to listen to serious programs even if dramatizations and other techniques are used to make them easily understandable.

The author concludes that people look not for new experiences in the mass media but for a repetition and an elaboration of their old experiences.

Maccoby, Eleanor E. "Television: Its Impact on School Children," Pub. Opinion Quart., 1951, 15:421-444.

Procedure. In Cambridge, Massachusetts, 332 mothers of 622 school children between the ages of 4 and 17 were interviewed as to the effect of TV on children's behavior and family life. This group included both TV and non-TV families, matched in age, sex, and socioeconomic status.

Results. Children of TV families are, on the average, watching TV at least two and a half hours on week days and three and a half hours on Sundays. However, TV children tend to separate to their own homes rather than watching programs as a group.

Though TV families spend more time together, 84 per cent keep their sets in the living room and during the evening hours while the set is on this keeps reading, play, and conversation at a minimum.

Approximately one third of the families report difficulty in getting children away from the set at mealtime, and one sixth have resolved this by serving meals to the children in front of the set. Children in TV families go to bed later than similarly aged children in non-TV homes.

Though children are to a large extent substituting TV for other mass media, much additional time is taken from other activities and devoted to TV. Thus their total exposure to the mass media has doubled. In general TV parents do not feel TV is harmful to their children, but rather that it has entertainment and educational values as well as the advantage of a "pacifier" (e.g., keeping children quiet).

The authors discuss the psychological implications of their findings with special reference to fantasy life of children, frustration-aggression, vicarious habit formation. They note that "the part television plays in a child's life is probably not qualitatively different from that of the movies and other mass media, and in many ways TV probably plays a role similar to that of the fairy stories and fantasy play which have been part of children's lives since our earliest records of man."

McDonagh, Edward C., and associates. "Television and the Family," Sociol. and Soc. Research, 1950, 35:113-122.

Procedure. A community, consisting of 800 families, in the Southern California area was selected for study. Every fifth home in the area having a TV aerial was interviewed concerning changes in visiting and reading activities, motion picture attendance, radio listening, and conversation while watching TV. To get a control group, for every TV family interviewed, the nearest home without a TV aerial was also visited and the family questioned about their activities over a time period equal to the amount of time the neighboring family had owned the TV set.

Results. There is practically no difference in educational status or in age of parents between TV and non-TV homes; but they do differ significantly with respect to number of children. The TV homes averaged 1.8 children, while non-TV homes averaged only 1.3

TV families are visiting less (66 per cent report less visiting), while non-TV families are visiting about the same if not a little more (58 per cent report visiting the same and 26 per cent say they are visiting more).

More than three fourths of the TV families report they are attending motion pictures less often now that they have TV, and 67 per cent report they are reading less. The results are most marked for radio listening where 88 per cent of the TV group report decreased listening. The control group is reading, listening to the radio, and seeing movies about the same amount as before.

Among the TV families, although they are now home more often since acquiring TV, 59 per cent report they are conversing less. Of the non-TV families, only 14 per cent report less conversation while 67 per cent report they have "conversed" about the same.

Riley, John W., Frank V. Cantwell, and Katherine F. Ruttiger. "Some Observations on the Social Effects of Television," *Pub. Opinion Quart.*, 1949, 13:223-234.

Procedure. In the summer of 1948 interviews were conducted in 278 TV homes, and in a matched sample of 278 non-TV homes in an Eastern city of 35,000 population.

Results. The most recent additions to the TV audience are from the lower socioeconomic levels.

Seventy-four per cent of old TV owners (had set six months or more) and 58 per cent of new owners (had set less than six months) report that the family has new interests in common as a result of TV, e.g., interest in sports, watching TV with children.

Sixty-two per cent of the old owners and 49 per cent of the new owners report changes in the family's social relationships, e.g., more company and more new friends.

TV apparently affects other leisure time activities, e.g., radio listening, movie attendance, and reading have dropped off in TV families. However, the impact is not uniform for all segments of the audience.

To young children, TV is not a substitute, but rather an added activity. The authors conclude that TV is rapidly gaining public acceptance and that it is stimulating new interests within the family and widening the family's social relationships. They further caution that TV is still young so that these trends may be unstable.

Schramm, Wilbur, and David M. White. "Age, Education, and Economic Status as Factors in Newspaper Reading," *Journalism Quart.*, 1949, 26: 149–159. In part reprinted in *Mass Communications*, University of Illinois Press, Urbana, 1949, pp. 402–412.

Procedure. A readership study was made of 746 randomly selected readers of an evening paper which had a circulation of about 65,000.

Results. Amount of news reading tends to increase with age, with education, and with economic status. News reading increases rapidly in the teens, reaches a peak between the ages of 30 and 50, and then drops off slightly. High school educated persons read more news than grade school educated persons, and college educated read somewhat more news than high school educated persons.

Education seems to make a greater difference in women's reading than in men's, while men's reading is more affected by economic status than is women's.

A young reader seems to be introduced to the newspaper by its pictorial content. Comics are the most read items among readers 10 to 15.

Teen-agers, persons who have only grade school education, and persons in the lower economic groups are more likely to read crime and disaster news.

Reading of political and editorial cartoons begins strongly in the teens, increases slightly, then falls off. It increases with economic status.

Silvey, Robert. "An Enquiry into Television Viewing," BBC Quart., January, 1950. In part reprinted under the title "Television Viewing in Britain" in Pub. Opinion Quart., 1950, 14:148-150.

Procedure. A random sample of TV households—1,000 in all—was selected. In 873 of these interviewers successfully arranged to have all members over 16 years fill out records of their TV-viewing activities for one week. For every TV home visited, the nearest non-TV home was visited and the same procedure requested. This control group included 856 homes.

Results. More than half the TV homes were lower middle or working class.

Comparison between the TV and control homes showed that the TV homes were somewhat higher in socioeconomic status, though education status was similar for the TV and non-TV groups. In the middle classes, the TV families averaged larger households (more children and old people) than the non-TV families.

TV families did not listen appreciably less to the radio between 6:00-8:00 P.M. and between 11:00 P.M. and midnight; but during the period of TV transmission radio listening decreased.

TV did not keep at home those who ordinarily would go out, for 19 per cent of the TV group were not at home between 8:30-10.00 P.M., as compared with 22 per cent of the non-TV group who were out.

Smythe, Dallas W. "An Analysis of Television Programs," Scientific Amer., 1951, 184:15-17.

Procedure. The entire output of New York City's seven television stations was monitored during the week beginning January 4 to January 11, 1951. A staff of twenty-one monitors with experienced supervisors made a complete inventory of every program produced during that week.

Results. One fourth of the total of 564 broadcast hours was given to dramatic programs, with crime plays and westerns the most frequent type of drama. Variety or vaudeville-type programs ranked second in terms of number of hours consumed (14 per cent), with children's programs third (13 per cent), sports and homemaking programs fourth (10 per cent each), and quiz, stunts, and contest programs in fifth place (7 per cent). Interviews with celebrities and news programs each accounted for 5 per cent of broadcast time.

Advertising accounted for 14 per cent of all program time, with the heaviest concentration in the "housewives hours" during weekdays.

Only one program during the sample week was produced under the auspices of an educational institution; and there was no type of formal education program. Science information programs used less than 1 per cent of the total program time, and another 1 per cent was given to children's information and instruction programs.

The author concludes that all but a few of these programs could not be considered "educational" except in a most superficial sense. Therefore the output of commercial television from an educational standpoint is far from satisfactory.

Smythe, Dallas W. and Angus Campbell. Los Angeles Television, May 23-29, 1951. National Association of Educational Broadcasters, Gregory Hall, Urbana, Illinois, 1951.

Procedure. During the seven-day period from May 23 to 29, 1951, the entire output of the eight television stations which serve the Los Angeles

area was observed by a specially trained group of forty monitors under the supervision of the authors. Seventeen major categories were used in classifying the programs.

Results.—Of the total TV time available, 26 per cent was given to adult drama programs, 16 per cent to domestic programs, 12 per cent to news reports, 10 per cent each to children's and variety programs, 6 per cent to music (primarily popular), and somewhat more than 5 per cent to sports programs. The remaining time was devoted in small amounts to such categories as information, religious, and public events programs. Of all the subclasses of programs, the largest were the western drama, accounting for approximately 10 per cent of all broadcast time, and the crime drama, contributing approximately 9 per cent. Together they accounted for approximately one fifth of all broadcast time for the sample week. Almost 18 per cent, or one minute in six, of the total time was devoted to various forms of advertising. The greatest proportion of advertising time occurred in the domestic hours, with the evening hours running a close second. Public agency announcements accounted for 0.4 per cent of the total time.

The analysis showed large differences in programming between days of the week, e.g., general drama programs used one fifth of all program time on weekdays, two fifths on Sundays, and almost 48 per cent on Saturday. Unlike the earlier study of New York television, there were no programs presented which were in any way connected with an educational institution and none were devoted to the fine arts or the dance.

PART II

I. RESEARCH

PROBLEMS, METHODOLOGY, THEORY, JOINT RESEARCH REPORTS

Allport, Gordon. The Use of Personal Documents in Psychological Science. Social Science Research Council, New York, 1941. The theory and methodology underlying the use of such communicative source material as diaries, letters, and autobiographies.

Allport, Gordon, and Leo Postman. *The Psychology of Rumor*. Holt, New York, 1947.

Although a study of the psychological forces which underlie the appearance and transmission of rumor, the conceptualizations and interpretation may be applied to many other forms of communication.

Berelson, Bernard, and Paul F. Lazarsfeld. The Analysis of Communication Content. University of Chicago (mimeographed), 1949.

A review of the theory and methodology of content analysis which includes an extensive bibliography.

Dollard, John, and O. H. Mowrer, "A Method of Measuring Tension in Written Documents," J. Abnorm. Soc. Psych., 1947, 42:1-32.

Description of a technique for the analysis of case-history material.

Fearing, Franklin. "Towards a Psychological Theory of Human Communication," J. Personality, 1951. (In Press.)

An attempt to establish a conceptual frame of reference within which the phenomena of communication may be considered.

Festinger, Leon. "Informal Social Communication," Psych. Rev., 1950, 57: 271–282.

A discussion of the interrelated hypotheses which investigations of communication in face-to-face groups may test.

Hovland, Carl I. "Changes in Attitude Through Communication," J. Abnorm. Soc. Psych., 1951, 46:424-437.

Survey of the problem areas in which research is going forward.

Janis, Irving. "Meaning and the Study of Symbolic Behavior," *Psychiatry*, 1943, 6:425-439.

Hypotheses and types of research in the communications field.

——. "The Problem of Validating Content Analysis," Language of Politics, George W. Stewart, New York, 1949, pp. 55–83.

Analysis of methods for determining whether the categories of content analysis describe what they purport to describe.

Kaplan, Abraham, and Joseph M. Goldsen. "The Reliability of Content Analysis Categories," *Language of Politics*. George W. Stewart, New York, 1949, pp. 83–113.

Analyzes the methods for determining the extent to which content analysts using the same categories agree as to results.

Lasswell, H., N. Leites, et al. Language of Politics: Studies in Quantitative Semantics. George W. Stewart, New York, 1949.

Various specialists contribute papers on theory, applications, and techniques of analysis of political communications.

Lazarsfeld, Paul F., and Frank N. Stanton, eds. Radio Research 1941. Duell, Sloan and Pearce, New York, 1941.

This and the two volumes next listed contain reports of research on a variety of problems in the communications field.

- -----. Radio Research 1942-43. Duell, Sloan and Pearce, New York, 1944.
- -----. Communications Research 1948-1949. Harper and Bros., New York, 1949.
- Pronko, N. H. "Language and Psycholinguistics: A Review," *Psych. Bull.*, 1946, 43:189–239.
- Schutz, William Carl. "Theory and Methodology of Content Analysis."
 Unpublished doctoral dissertation, University of California, Los Angeles Library, 1951.
- Riley, Matilda White, and Samuel H. Flowerman, "Group Relations as a Variable in Communications Research," Amer. Sociol. Rev., 1951, 16: 174-180.
- Silvey, Robert. "Methods of Viewer Research Employed by the British Broadcasting Corporation," Pub. Opinion Quart., 1951, 15:89–104.
- Smith, M. "The Communicative Act," J. Soc. Psych., 1950, 31:271–281. An important contribution to theory.
- White, Ralph K. "Value-Analysis," Society for the Psych. Study of Social Issues, Columbia University, 1951.
 - Sets forth a method of content analysis.
- Whorf, Benjamin L. "Science and Linguistics," The Technology Rev., 1940, 42: No. 6.

This and the item listed next are theoretical studies of the role of linguistic patterns in shaping thought.

——. "The Relation of Habitual Thought and Behavior to Language," Language, Culture and Personality, Menasha, Wisconsin.

AUDIENCE AND EFFECTS ANALYSIS

Cooper, Eunice, and Marie Jahoda. "The Evasion of Propaganda: How Prejudiced People Respond to Anti-prejudice Propaganda," J. Psych., 1947, 23:15–25.

The patterns of evasion here described are characteristic of the responses to other forms of communications content.

Doscher, Luelyne Bette. "An Experiment in Human Communication: Frames of Reference, the Audience and the Impact of a Radio Drama." Unpublished doctoral dissertation, University of California, Los Angeles Library, 1951.

Fearing, Franklin. Motion Pictures as a Medium of Instruction and Communication: An Experimental Analysis of the Effects of Two Films. Univ. of Calif. Publications in Culture and Society, 1950, 2:101-202.

Two educational films, one concerned primarily with attitudes toward venereal disease prophylaxis and one concerned with communicating information regarding malaria, are tested. Both films were produced by the Army Air Forces.

Handel, Leo A. Hollywood Looks at Its Audience. University of Illinois Press, Urbana, 1950.

A survey of the methods and results of motion picture audience research.

Herzog, Herta. "On Borrowed Experience," Studies in Philosophy and Soc. Sci., 1941, 9:65-94.

An analysis of the functional significance to the listener of radio daytime serials.

Hovland, Carl I., Arthur A. Lumsdaine, and Fred D. Sheffield. "Experiments on Mass Communication." Vol. III in Studies in Social Psychology in World War II. Princeton University Press, 1949.

A comprehensive investigation of the effects of the educational films produced for the American soldier in World War II.

Janis, Irving L., Arthur A. Lumsdaine, and Arthur I. Gladstone, "Effects of Preparatory Communications on Reactions to a Subsequent News Event," Pub. Opinion Quart., 1951, 15:487-518.

Klapper, Joseph T. The Effects of Mass Media: A Report to the Director of the Public Library Inquiry. (Mimeographed.) Bureau of Applied Social Research, Columbia University, New York, 1949.

A comprehensive review of the literature in the field.

Lazarsfeld, Paul F., and Helen Dinerman. "Research for Action," in *Communications Research* 1948-49, Harper and Bros., New York, 1949, pp. 73-108.

A study of listeners and nonlisteners to radio.

Merton, Robert K. Mass Persuasion: the Social Psychology of a War Bond Drive. Harper and Bros., New York, 1946.

A carefully designed research on the process of persuasion utilizing the audience response to the famous Kate Smith "marathon" broadcast.

Rose, Nicholas. "A Psychological Study of Motion Picture Audience Behavior." Unpublished doctoral dissertation, University of California, Los Angeles Library, 1951.

Through use of infra-red photographic techniques the smiling and laughing behavior of an audience watching a film comedy was studied.

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An examination of the case against TV with findings mainly in favor of the defendant.

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The editors would like to add to the footnote of May Seagoe's article, "Children's Television Habits and Preferences," which appeared in the last issue of *The Quarterly*, that the Children's Theater Conference is an integral part of the American Educational Theater Association.

White, Llewellyn. The American Radio. University of Chicago Press, 1947.

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